# DATA PACKAGE

# ATC-1400A





# ATC-1400A DATA PACKAGE

1007-7501-000

10200 WEST YORK STREET / WICHITA, KANSAS 67215 U.S.A. / 316/522-4981 / TWX 910-741-6952

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# DRAWING LIST

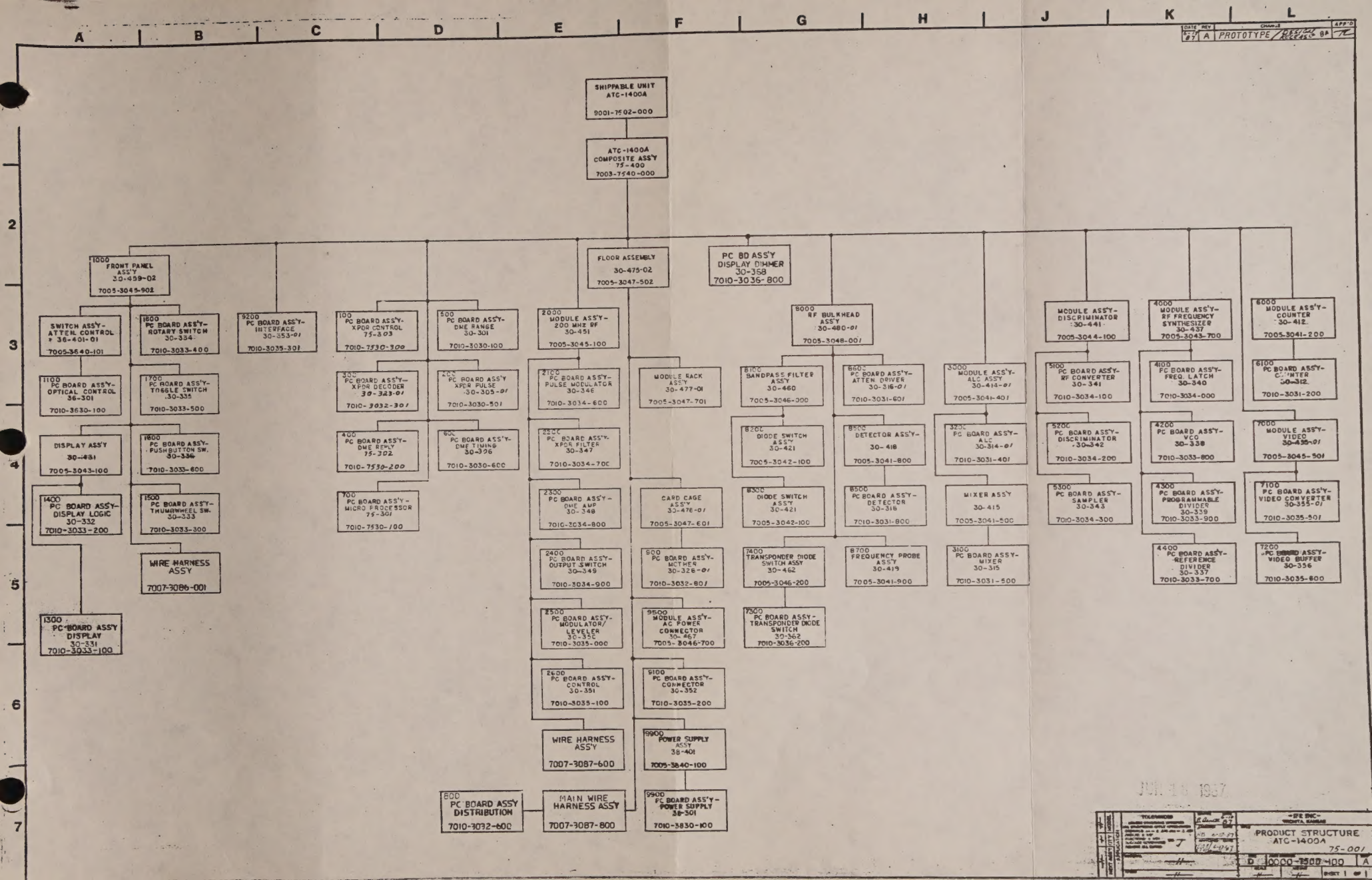
ATC-1400A, PRODUCT STRUCTURE
ATC-1400A, INTERCONNECT

ATC-1400A, COMPOSITE ASSY

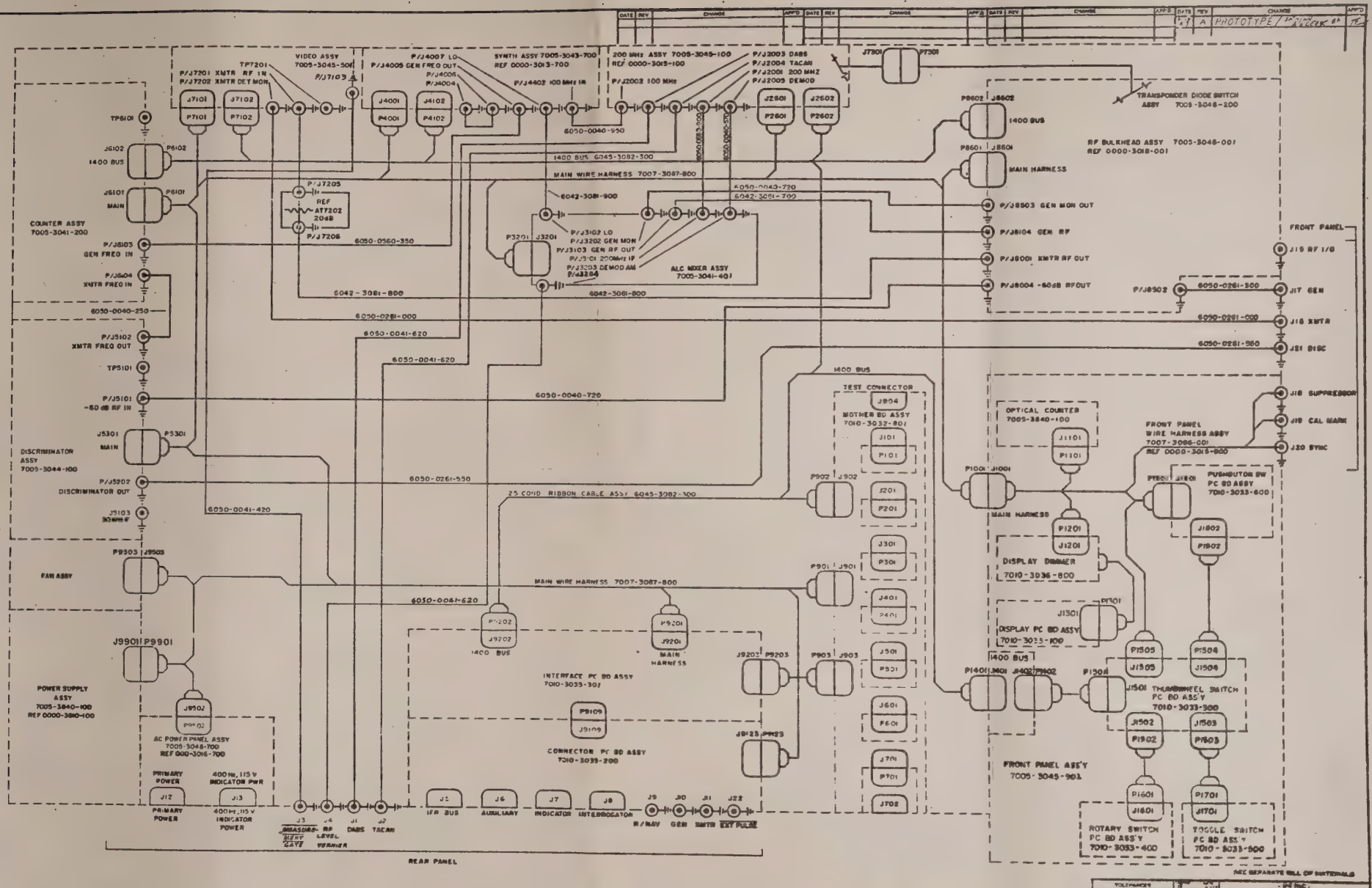
MECH ASSY, ALC/MIXER

PCB ASSY, PROCESSOR CONTROL
PCB ASSY, DME REPLY
PCB ASSY, TRANSPONDER CONTROL
PCB ASSY, TRANSPONDER PULSE
PCB ASSY, ALC
PCB ASSY, ATTENUATOR DRIVER
PCB ASSY, TRANSPONDER DECODER
PCB ASSY, MOTHERBOARD
PCB ASSY, CONNECTOR
PCB ASSY, INTERFACE
PCB ASSY, VIDEO CONVERTER
PCB ASSY, DISPLAY DIMMER

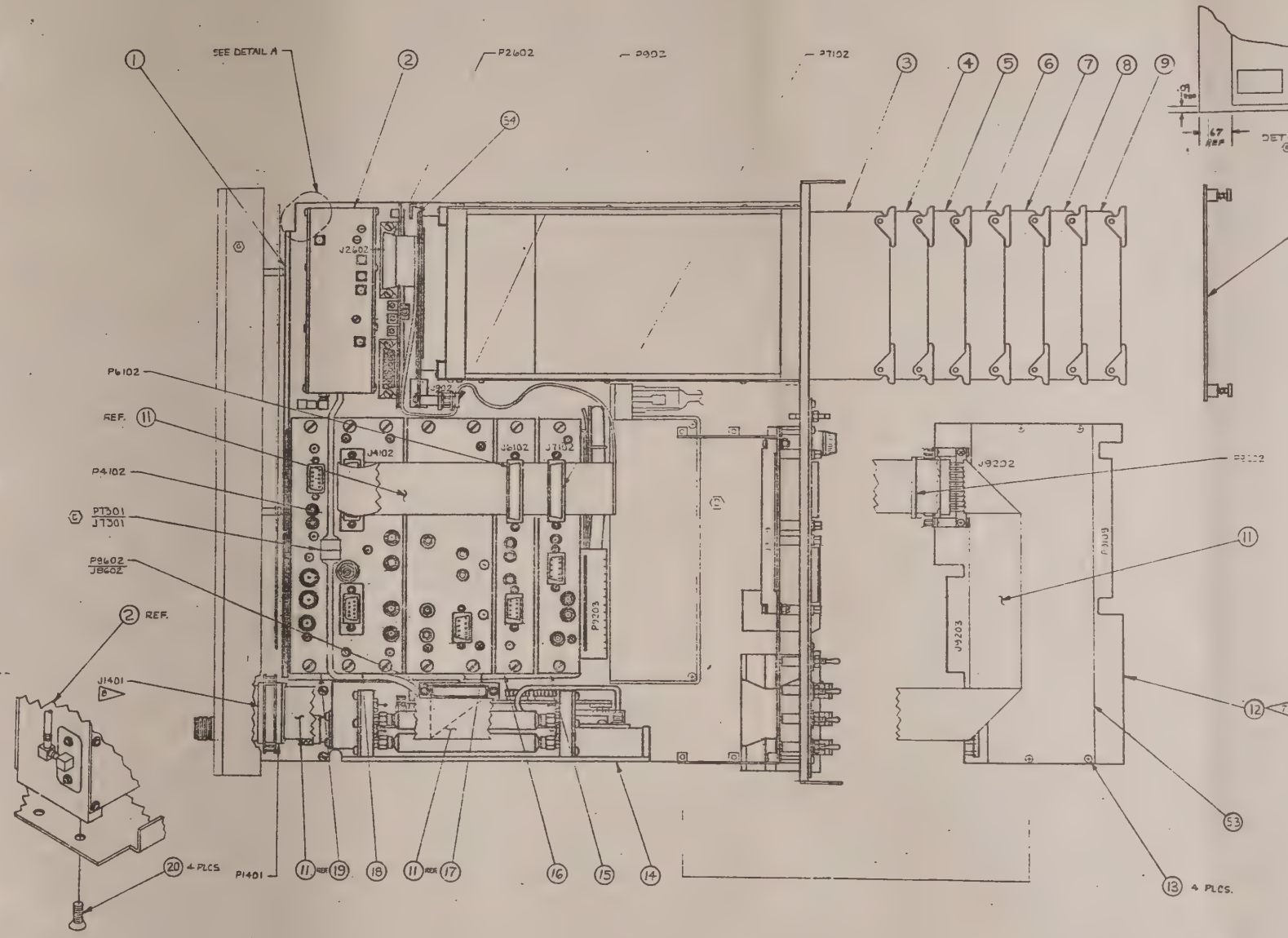
OPT BOM, ATC-1400A, OPT.01 4KW


SHIPPABLE UNIT ATC-1400A 9001-7502-000
ATC-1400A COMPOSITE ASS'Y 75-400 7003-7540-000
1000 FRONT PANEL ASS'Y 30-459-02 7005-3045-902
SWITCH ASS'Y-ATTEN. CONTROL 36-401-01 7005-3640-101
1100 PC BOARD ASS'Y-OPTICAL CONTROL 36-301 7010-3630-100
DISPLAY ASS'Y 30-431 7005-3043-100
1400 PC BOARD ASS'Y-DISPLAY LOGIC 30-332 7010-3033-200
1300 PC BOARD ASS'Y DISPLAY 30-331 7010-3033-100
1600 PC BOARD ASS'Y-ROTARY SWITCH 30-334 7010-3033-400
1700 PC BOARD ASS'Y-TOGGLE SWITCH 30-335 7010-3033-500
1800 PC BOARD ASS'Y-PUSHBUTTON SW. 30-336 7010-3033-600
1500 PC BOARD ASS'Y-THUMBWHEEL SW. 30-333 7010-3033-300
WIRE HARNESS ASSY 7007-3086-001
9200 PC BOARD ASS'Y-INTERFACE 30-353-01 7010-3035-301
100 PC BOARD ASS'Y-XPDR CONTROL 75-303 7010-7530-300
300 PC BOARD ASS'Y-XPDR DECODER 30-323-01 7010-3032-301
400 PC BOARD ASS'Y-DME REPLY 75-302 7010-7530-200
700 PC BOARD ASS'Y-MICRO PROCESSOR 75-301 7010-7530-100
500 PC BOARD ASS'Y-DME RANGE 30-301 7010-3030-100
200 PC BOARD ASS'Y XPDR PULSE 30-305-01 7010-3030-501
600 PC BOARD ASS'Y-DME TIMING 30-396 7010-3030-600
FLOOR ASSEMBLY 30-475-02 7005-3047-502
2000 MODULE ASS'Y-200 MHz RF 30-451 7005-3045-100
2100 PC BOARD ASS'Y-PULSE MODULATOR 30-346 7010-3034-600
2200 PC BOARD ASS'Y-XPDR FILTER 30-347 7010-3034-700
2300 PC BOARD ASS'Y-DME AMP 30-348 7010-3034-800
2400 PC BOARD ASS'Y-OUTPUT SWITCH 30-349 7010-3034-900
2500 PC BOARD ASS'Y-MODULATOR/LEVELER 30-350 7010-3035-000
2600 PC BOARD ASS'Y-CONTROL 30-351 7010-3035-100
WIRE HARNESS ASS'Y 7007-3087-600
800 PC BOARD ASS'Y DISTRIBUTION 7010-3032-600
MAIN WIRE HARNESS ASS'Y 7007-3087-800
MODULE RACK ASS'Y 30-477-01 7005-3047-701
CARD CAGE ASS'Y 30-476-01 7005-3047-601
900 PC BOARD ASS'Y-MOTHER 30-326-01 7010-3032-801
9500 MODULE ASS'Y-AC POWER CONNECTOR 30-467 7005-3046-700
9100 PC BOARD ASS'Y-CONNECTOR 30-352 7010-3035-200
9900 POWER SUPPLY ASSY 38-401 7005-3840-100
9900 PC BOARD ASS'Y-POWER SUPPLY 38-501 7010-3830-100
PC BD ASS'Y DISPLAY DIMMER 30-358 7010-3036-800
8000 RF BULKHEAD ASS'Y 30-480-01 7005-3048-001
8100 BANDPASS FILTER ASS'Y 30-460 7005-3046-300
8200 DIODE SWITCH ASS'Y 30-421 7005-3042-100
8300 DIODE SWITCH ASS'Y 30-421 7005-3042-100
7400 TRANSPONDER DIODE SWITCH ASS'Y 30-462 7005-3046-200
7500 PC BOARD ASS'Y-TRANSPONDER DIODE SWITCH 30-362 7010-3036-200
8600 PC BOARD ASS'Y-ATTEN DRIVER 30-316-01 7010-3031-601
8500 DETECTOR ASS'Y-30-418 7005-3041-800
8500 PC BOARD ASS'Y-DETECTOR 30-318 7010-3031-800
8700 FREQUENCY PROBE ASS'Y 30-419 7005-3041-900
3000 MODULE ASS'Y-ALC ASS'Y 30-414-01 7005-3041-401
3200 PC BOARD ASS'Y-ALC 30-314-01 7010-3031-401
MIXER ASS'Y 30-415 7005-3041-500
3100 PC BOARD ASS'Y-MIXER 30-315 7010-3031-500
MODULE ASS'Y-DISCRIMINATOR 30-441 7005-3044-100
5100 PC BOARD ASS'Y-RF CONVERTER 30-341 7010-3034-100
5200 PC BOARD ASS'Y-DISCRIMINATOR 30-342 7010-3034-200
5300 PC BOARD ASS'Y-SAMPLER 30-343 7010-3034-300
4000 MODULE ASS'Y-RF FREQUENCY SYNTHESIZER 30-437 7005-3043-700
4100 PC BOARD ASS'Y-FREQ. LATCH 30-340 7010-3034-000
4200 PC BOARD ASS'Y-VCO 30-338 7010-3033-800
4300 PC BOARD ASS'Y-PROGRAMMABLE DIVIDER 30-339 7010-3033-900
4400 PC BOARD ASS'Y-REFERENCE DIVIDER 30-337 7010-3033-700
6000 MODULE ASS'Y-COUNTER 30-412 7005-3041-200
6100 PC BOARD ASS'Y-COUNTER 30-312 7010-3031-200
7000 MODULE ASS'Y-VIDEO 30-435-01 7005-3045-501
7100 PC BOARD ASS'Y-VIDEO CONVERTER 30-355-01 7010-3035-501
7200 PC BOARD ASS'Y-VIDEO BUFFER 30-356 7010-3035-600
DATE 6-17-87 REV A PROTOTYPE RELEASE
APP'D
PRODUCT STRUCTURE ATC-1400A 75-001
D 10000-3500-100 A
JUN 18 1987




DATE | REV | CHANGE | APP'D
A PROTOTYPE / PRODUCTION RELEASE
TP7201 XMTR RF IN P/J7201
P/J7202 XMTR DET MON
VIDEO ASSY 7005-3045-501
P/J7103
P/J4005 GEN FREQ OUT
P/J4007 LO
P/J4006
P/J4004
SYNTH ASSY 7005-3043-700 REF 0000-3013-700
P/J4402 100 MHz IN
200 MHz ASSY 7005-3045-100 REF 0000-3015-100
P/J2002 100 MHz
P/J2003 DABS
P/J2004 TACAN
P/J2001 200 MHz
P/J2005 DEMOD
J7101 J7102 P7101 P7102
J4001 J4102 P4001 P4102
J2601 J2602 P2601 P2602
JT301 PT301
TRANSPONDER DIODE SWITCH ASSY 7005-3046-200
P8602 J8602 1400 BUS
P8601 J8601 MAIN HARNESS
RF BULKHEAD ASSY 7005-3048-001 REF 0000-3018-001
TP6101
J6102 1400 BUS P6102
J6101 MAIN P6101
COUNTER ASSY 7005-3041-200
P/J6103 GEN FREQ IN
P/J6104 XMTR FREQ IN
6050-0040-250
P/J5102 XMTR FREQ OUT
TP5101
P/J5101 -50 dB RF IN
J5301 MAIN P5301
DISCRIMINATOR ASSY 7005-3044-100
P/J5202 DISCRIMINATOR OUT
J5103
P/J7205 REF AT7202 20dB P/J7206
6050-0560-350
6042-3081-900
6042-3081-800
6050-0261-000
6050-0041-620
6050-0041-420
6050-0040-720
6050-0040-950
1400 BUS 6045-3082-300
MAIN WIRE HARNESS 7007-3087-800
6050-0043-720
6042-3081-700
P3201 J3201
P/J3102 LO
P/J3202 GEN MON
P/J3103 GEN RF OUT
P/J3101 200MHz IF
P/J3203 DEMOD AM
P/J3204
ALC MIXER ASSY 7005-3041-401
P/J8503 GEN MON OUT
P/J8104 GEN RF
P/J8001 XMTR RF OUT
P/J8004 -60dB RFOUT
FRONT PANEL
J19 RF I/O
P/J8502 6050-0261-300
J17 GEN
J16 XMTR
J21 DISC
J18 SUPPRESSOR
J19 CAL MARK
J20 SYNC
FRONT PANEL WIRE HARNESS ASSY 7007-3086-001 REF 0000-3015-600
P9303 J9303
FAN ASSY
J9901 P9901
POWER SUPPLY ASSY 7005-3840-100 REF 0000-3010-100
J8502 P8502
AC POWER PANEL ASSY 7005-3048-700 REF 000-3016-700
PRIMARY POWER
400 Hz, 115 V INDICATOR PWR
J12 PRIMARY POWER
J13 400Hz, 115 V INDICATOR POWER
J3 J4 J1 J2
MEASURED RF LEVEL DABS TACAN
J5 J6 J7 J8 J9 J10 J11 J22
IFR BUS AUXILIARY INDICATOR INTERROGATOR R/NAV GEN XMTR EXT PULSE
REAR PANEL
TEST CONNECTOR J904
MOTHER BD ASSY 7010-3032-801
J101 P101
J201 P201
J301 P301
J401 P401
J501 P501
J601 P601
J701 P701
J702
P902 J902
P901 J901
P903 J903
P1202 J9202
P9201 J9204
J9203 P9203
P9109 J9109
J9123 P9123
1400 BUS
MAIN HARNESS
INTERFACE PC BD ASSY 7010-3033-301
CONNECTOR PC BD ASSY 7010-3033-200
25 COND RIBBON CABLE ASSY 6045-3082-300
P1001 J1001
P1401 J1401
P1402 J1402
P1301 J1301
OPTICAL COUNTER 7005-3840-100
J1101 P1101
P1201 J1201
DISPLAY DIMMER 7010-3036-800
DISPLAY PC BD ASSY 7010-3033-100
P1501 J1501
PUSHBUTTON SW PC BD ASSY 7010-3033-600
J1802 P1802
P1505 J1505
P1504 J1504
THUMBWHEEL SWITCH PC BD ASS'Y 7010-3033-300
J1502 P1502
J1503 P1503
FRONT PANEL ASS'Y 7005-3045-901
P1601 J1601
P1701 J1701
ROTARY SWITCH PC BD ASS'Y 7010-3033-400
TOGGLE SWITCH PC BD ASS'Y 7010-3033-500
SEE SEPARATE BILL OF MATERIALS
- BR INC - WICHITA, KANSAS
ATC-1400A INTERCONNECT
(ATC-1400A) (75-100)
SIZE D DWG NO 0104P-7010-000 REV A
SCALE NONE SHEET 1 OF 1

| DATE | REV | CHANGE | APPD |
|---|---|---|---|
| 7/7 | A | DESIGN RELEASE 1223 | TC |

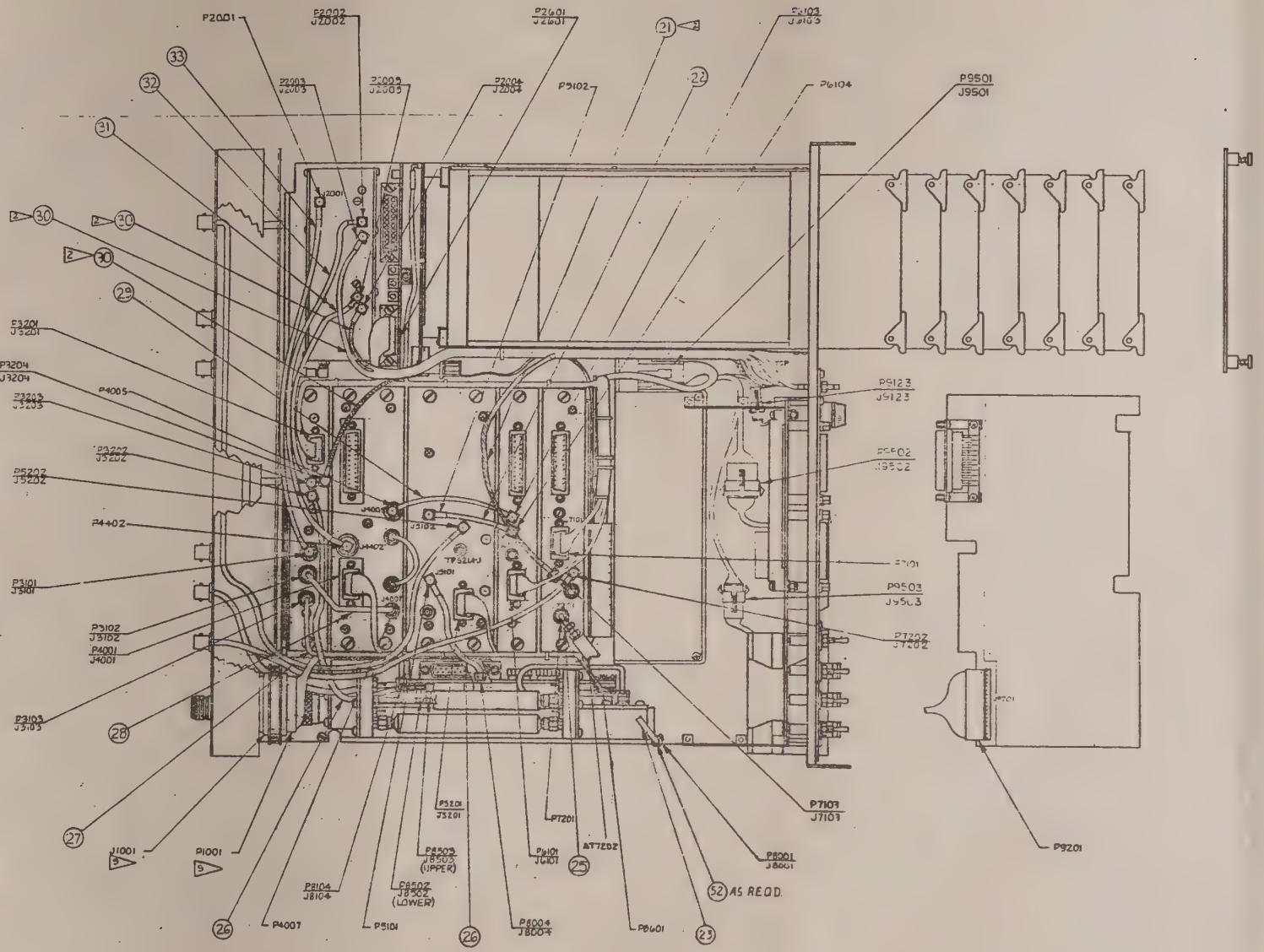



NOTES:

1. PXXXX / JXXXX PXXXX IS THE FREE END, JXXXX IS THE FIXED END. ASSEMBLE PXXXX TO JXXXX.
2. ONE OF FOUR COAXES (TO BE BUNDLED WITH TY-RAP) LEADING TO REAR PANEL FOR DESTINATION SEE SHT 2 AND MATCH COAX BY SHADING TO THE PROPER JACK (J1, J2, J3 OR J4).
3. PART OF FLOOR ASS'Y SHOWN FOR CLARITY
4. COVER HOLE PATTERN ON (ITEM 39) WITH INSULATOR MYLAR (ITEM 56) AND COVER (ITEM 56) WITH ADHESIVE MYLAR (ITEM 36) AS SHOWN.
5. COVER HOLE PATTERN ON (ITEM 40) WITH INSULATOR MYLAR (ITEM 55) AND COVER (ITEM 55) WITH ADHESIVE MYLAR (ITEM 51) AS SHOWN.
6. USE 2-SIDED TAPE (ITEM 46) AS REQUIRED TO ADHERE TRIM STRIP (ITEM 45) TO SIDE FRAME (ITEM 38).
7. ASSEMBLE INTERFACE P.C. BD. (ITEM 12) TO L BRACKETS ON CONNECTOR PC BD ASSY (P/ITEM 1)
8. MOUNTED ON P.C. BOARD.
9. MOUNTED ON OPTICAL COUNTER ASS'Y. (P/ITEM 50)
10. PLACE LABEL (ITEM 56) PER DIMENSIONS SHOWN IN DETAIL "B."
11. READ THIS FIRST BEFORE ASSEMBLING COMPOSITE ATC 1400 THESE INSTALLATION PROCEDURES SHOULD MINIMIZE ALIGNMENT PROBLEMS BETWEEN TRIM BARS & SIDE FRAMES. ANYTHING DIFFERENT COULD CAUSE BIG PROBLEMS. THIS PROCEDURE WAS TRIED SEVERAL TIMES AND WORKED GOOD. START WITH BRKTS L & R FR PANEL MTG (ITEMS 60 & 61) INSTALLED ON SIDE FRAMES LOOSE. THEN INSTALL SIDE FRAME AND FLOOR ASS'Y. DO NOT TIGHTEN ANY SCREWS AT THIS TIME. NEXT INSTALL BOTTOM TRIM BAR TO BRKTS ON SIDE FRAMES AND TIGHTEN TRIM BAR SCREWS ONLY. IMPORTANT NOTE! BE SURE TRIM BAR & SIDE FRAMES ARE EVEN ACROSS THE TOP OR FLUSH. AT THIS POINT YOU CAN INSTALL FR PANEL ASS'Y. THEN INSTALL TOP TRIM BAR AND TIGHTEN DOWN. THEN FINISH INSTALLING SIDE FRAMES TOGATHER. WATCH FOR ANY BINDING OF FR PANEL & SIDE FRAMES IN TRIM BARS AS IS GOING ON. THEN TIGHTEN THE REST OF THE SCREWS. AFTER ALL THIS YOU CAN PROCEED WITH THE REST OF THE COMPOSITE.
FLEX STRIPS NEED TO BE FLAT AGAINST EDGE OF PC BDS. OTHERWISE BINDING WILL OCCUR.

SEE SEPARATE BILL OF MATERIALS

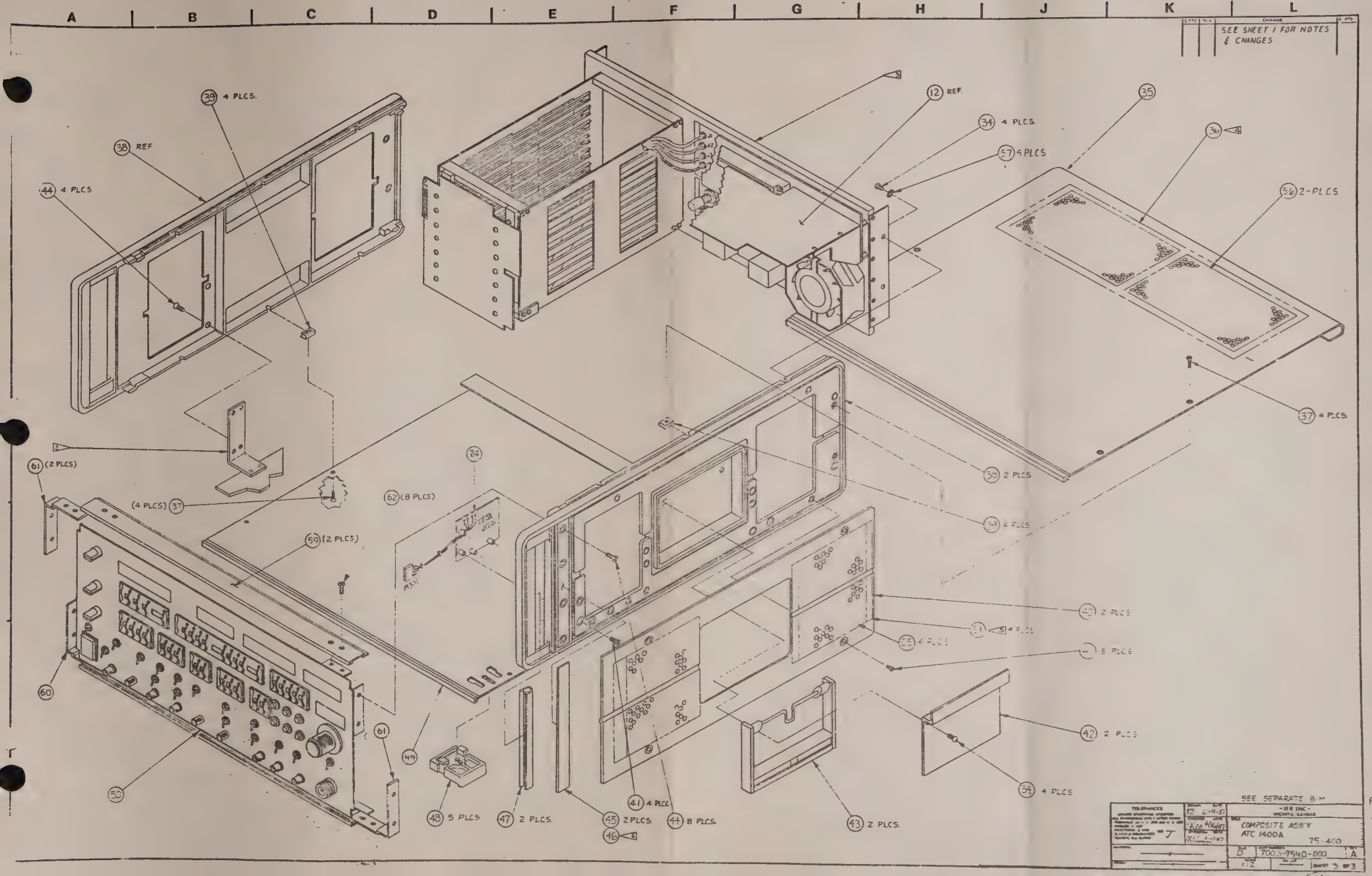
| | | |
|---|---|---|
| TOLERANCES | | - HSE INC - SEMITAL SUNNYVALE |
| | | COMPOSITE ASS'Y - ATC 1400A |
| | | 75-400 |
| | | 7003-7540-000 A |
| | | SHEET 1 OF 2 |




| DATE | REV | CHANGES | APPD |
|---|---|---|---|
| | | SEE SHEET 1 FOR NOTES & CHANGES | |

SEE SEPARATE BILL OF MATERIALS

| | | |
|---|---|---|
| TOLERANCES | DRN RB 6-9-67 | - SPEC - WICHITA, KANSAS |
| | CHK | COMPOSITE ASS'Y. ATC 1400A 75-400 |
| | ENGR APPD | |
| | MFG APPD | |
| | QUALITY APPD | |
| | | D 1004-7540-000 A |
| | | SHEET 1 OF 1 |


SEE SHEET 1 FOR NOTES & CHANGES
39 4 PLCS.
38 REF
44 4 PLCS
12 REF.
34 4 PLCS.
57 4 PLCS
35
36
56 2 PLCS
37 4 PLCS.
61 (2 PLCS)
(4 PLCS) 37
62 (8 PLCS)
24
59 (2 PLCS.)
30 2 PLCS
33 4 PLCS
32 2 PLCS
31 4 PLCS
55 4 PLCS
54 5 PLCS
42 2 PLCS
34 4 PLCS
60
50
61
49
43 5 PLCS
47 2 PLCS.
41 4 PLCS
45 2 PLCS.
46
44 8 PLCS.
43 2 PLCS.
SEE SEPARATE B.M
- ISI INC - WICHITA, KANSAS
COMPOSITE ASS'Y ATC 1400A
75-450
700S-7540-000
A
SHEET 3 OF 3

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 1

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7003-7540-000 | A | COMP ASSY,ATC-1400A | | 05/04/87 |

| STAT | REF DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | *01 | 1.00 | 7005-3047-502 | MECH ASSY,FLOOR,UNVRSL PWR SUP | 87/04/22 | 99/99/99 |
| ACT | *02 | 1.00 | 7005-3045-100 | MECH ASSY,200MHZ RF | 00/00/00 | 99/99/99 |
| ACT | *03 | 1.00 | 7010-7530-200 | PCB ASSY,TRANSPONDER CONTROL | 87/04/22 | 99/99/99 |
| ACT | *04 | 1.00 | 7010-3030-501 | PCB ASSY,TRANSPONDER PULSE | 87/04/22 | 99/99/99 |
| ACT | *05 | 1.00 | 7010-7032-301 | PCB ASSY,TRANSPONDER DECODER | 87/04/22 | 99/99/99 |
| ACT | *06 | 1.00 | 7010-7530-200 | PCB ASSY,DME REPLY | 87/04/23 | 99/99/99 |
| ACT | *07 | 1.00 | 7010-3030-600 | PCB ASSY,DME TIMING | 00/00/00 | 99/99/99 |
| ACT | *08 | 1.00 | 7010-3030-100 | PCB ASSY,DME RANGE | 00/00/00 | 99/99/99 |
| ACT | *09 | 1.00 | 7010-7530-100 | PCB ASSY PROCESSOR CONTROL | 87/04/22 | 99/99/99 |
| ACT | *10 | 1.00 | 6500-3083-200 | MINOR ASSY,COVER,CARD CAGE*ASY | 00/00/00 | 99/99/99 |
| ACT | *11 | 1.00 | 6045-3082-300 | RIBBON CABLE ASSY,25 COND,58.2 | 00/00/00 | 99/99/99 |
| ACT | *12 | 1.00 | 7010-3035-301 | PCB ASSY,INTERFACE | 87/04/22 | 99/99/99 |
| ACT | *13 | 4.00 | 2803-0250-006 | SCREW,4-40 X 1/4 PPHM | 00/00/00 | 99/99/99 |
| ACT | *14 | 1.00 | 7005-3048-001 | MECH ASSY,RF BULKHEAD | 87/04/22 | 99/99/99 |
| ACT | *15 | 1.00 | 7005-3045-501 | MECH ASSY,VIDEO | 87/04/22 | 99/99/99 |
| ACT | *16 | 1.00 | 7005-3041-200 | MECH ASSY,COUNTER | 00/00/00 | 99/99/99 |
| ACT | *17 | 1.00 | 7005-3044-100 | MECH ASSY,DISCRIMINATOR | 00/00/00 | 99/99/99 |
| ACT | *18 | 1.00 | 7005-3043-700 | MECH ASSY,RF FREQ SYNTHESIZER | 00/00/00 | 99/99/99 |
| ACT | *19 | 1.00 | 7005-3041-401 | MECH ASSY, ALC/MIXER | 87/04/22 | 99/99/99 |
| ACT | *20 | 4.00 | 2809-0313-003 | SCREW,10-32 X 5/16 PFHM | 00/00/00 | 99/99/99 |
| ACT | *21 | 1.00 | 6050-0041-420 | RG 316/U FLEX COAX ASSY | 00/00/00 | 99/99/99 |
| ACT | *22 | 1.00 | 6050-0040-250 | COAX ASSY,FLEXIBLE,RG 316/U | 00/00/00 | 99/99/99 |
| ACT | *23 | 1.00 | 6042-3081-800 | COAX ASSY,SEMI-RIGID .141 DIA | 00/00/00 | 99/99/99 |
| ACT | *24 | 1.00 | 7010-3036-800 | PCB ASSY,DISPLAY DIMMER | 87/03/13 | 99/99/99 |
| ACT | *25 | 1.00 | 2200-0190-100 | CONN,ADAPT,M2F SMA,SWEPT R A | 00/00/00 | 99/99/99 |
| ACT | *26 | 2.00 | 6050-0320-720 | COAX ASSY,316,R F SMB/R F SMB | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 2

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7003-7540-000 | A | COMP ASSY,ATC-1400A | | 05/04/87 |

| STAT | REF DES | QTY | COMP PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | *27 | 1.00 | 6042-3081-700 | COAX ASSY,SEMI-RIGID, 086 DIA | 00/00/00 | 99/99/99 |
| ACT | *28 | 1.00 | 6042-3081-900 | COAX ASSY SEMI-RIGID, 086 DIA | 00/00/00 | 99/99/99 |
| ACT | *29 | 1.00 | 6050-0560-350 | COAX ASSY,316,R M SMA/R F SMB | 00/00/00 | 99/99/99 |
| ACT | *30 | 3.00 | 6050-0041-620 | COAX ASSY,316,R F SMB/R F SMB | 00/00/00 | 99/99/99 |
| ACT | *31 | 1.00 | 6050-0040-570 | COAX ASSY,316,R F SMB/R F SMB | 00/00/00 | 99/99/99 |
| ACT | *32 | 1.00 | 6050-0040-950 | COAX ASSY,316,R F SMB/R F SMB | 00/00/00 | 99/99/99 |
| ACT | *33 | 1.00 | 6050-0560-900 | COAX ASSY,316,R M SMA/R F SMB | 00/00/00 | 99/99/99 |
| ACT | *34 | 8.00 | 2805-0250-006 | SCREW 8-32X1/4 PBHMS | 00/00/00 | 99/99/99 |
| ACT | *35 | 1.00 | 1414-7606-501 | COVER,TOP | 87/02/19 | 99/99/99 |
| ACT | *36 | 1.00 | 1414-3067-600 | COVER,TOP COVER VENT,5" X 15" | 00/00/00 | 99/99/99 |
| ACT | *37 | 8.00 | 2804-0500-003 | SCREW,6-32 X 1/2 PFHM | 00/00/00 | 99/99/99 |
| ACT | *38 | 2.00 | 1415-7627-500 | SIDE FRAME | 00/00/00 | 99/99/99 |
| ACT | *39 | 8.00 | 2850-0000-001 | SPEED NUT TIMMERMAN C11351632 | 00/00/00 | 99/99/99 |
| ACT | *40 | 2.00 | 1414-7612-101 | SIDE COVER | 87/02/19 | 99/99/99 |
| ACT | *41 | 12.00 | 2804-0250-003 | SCREW 6-32X1/4 PFHMS | 00/00/00 | 99/99/99 |
| ACT | *42 | 2.00 | 2506-7606-900 | PLATE,HANDLE MTG,PAINTED | 00/00/00 | 99/99/99 |
| ACT | *43 | 2.00 | 1407-7632-400 | HANDLE ASSY 2 | 00/00/00 | 99/99/99 |
| ACT | *44 | 12.00 | 2805-0375-003 | SCREW 8-32 X 3/8 PFHMS | 00/00/00 | 99/99/99 |
| ACT | *45 | 2.00 | 2400-7607-001 | DECAL TRIM STRIP | 87/02/19 | 99/99/99 |
| ACT | *46 | 1.00 | 1050-0000-091 | DOUBLE SIDED TAPE | 00/00/00 | 99/99/99 |
| ACT | *47 | 2.00 | 1407-7632-700 | HANDLE EXTRUSION | 00/00/00 | 99/99/99 |
| ACT | *48 | 5.00 | 1421-7630-200 | FOOT ASSY 2 *ASY | 00/00/00 | 99/99/99 |
| ACT | *49 | 1.00 | 1414-7606-601 | COVER,BOTTOM,7IN RACK MNT CASE | 87/02/19 | 99/99/99 |
| ACT | *50 | 1.00 | 7005-3045-902 | MECH ASSY,FRONT PNL,UN PWR SUP | 87/04/23 | 99/99/99 |
| ACT | *51 | 4.00 | 1414-3067-500 | COVER,SIDE COVER VENT,4.5*2.3 | 00/00/00 | 99/99/99 |
| ACT | *52 | 25.00 | 6004-6005-400 | TY-RAP,4.0 LG | 00/00/00 | 99/99/99 |

JUN 18 19[illegible]

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

ASSY NO. 7003-7540-000 | REVISION A | DESCRIPTION COMP ASSY,ATC-1400A | LAST ECN | DATE INC 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 1050-0000-091 | | DOUBLE SIDED TAPE | 1.00 | EA | F5 | ^^^^^^ *46 |
| 1400-4980-100 | B | BRKT,LEFT FRONT PANEL MOUNTING | 2.00 | EA | S7 | ^^^^^^ *61 |
| 1400-4980-101 | B | BRKT,RIGHT FRONT PANEL MOUNT | 1.00 | EA | S7 | ^^^^^^ *60 |
| 1407-7632-400 | C | HANDLE ASSY 2 | 2.00 | EA | S7 | ^^^^^^ *43 |
| 1407-7632-700 | A | HANDLE EXTRUSION | 2.00 | EA | P4 | ^^^^^^ *47 |
| 1414-3067-500 | B | COVER,SIDE COVER VENT,4.5*2.3 | 4.00 | EA | P3 | ^^^^^^ *51 |
| 1414-3067-600 | B | COVER,TOP COVER VENT,5" X 15" | 1.00 | EA | P3 | ^^^^^^ *36 |
| 1414-7606-501 | E | COVER,TOP | 1.00 | EA | S7 | ^^^^^^ *35 |
| 1414-7606-601 | H | COVER,BOTTOM,7IN RACK MNT CASE | 1.00 | EA | S7 | ^^^^^^ *49 |
| 1414-7612-101 | B | SIDE COVER | 2.00 | EA | S7 | ^^^^^^ *40 |
| 1415-7627-500 | J | SIDE FRAME | 2.00 | EA | P4 | ^^^^^^ *38 |
| 1421-7630-200 | A | FOOT ASSY 2 *ASY | 5.00 | EA | S7 | ^^^^^^ *48 |
| 2200-0190-100 | | CONN,ADAPT,M2F SMA,SWEPT R.A | 1.00 | EA | P2 | ^^^^^^ *25 |
| 2400-3070-100 | C | LABEL, GP1B ADDRESS IEEE | 1.00 | EA | P3 | ^^^^^^ *56 |
| 2400-7607-001 | D | DECAL TRIM STRIP | 2.00 | EA | S7 | ^^^^^^ *45 |
| 2410-4950-200 | B | BAR,TRIM,FRONT PANEL | 2.00 | EA | S7 | ^^^^^^ *59 |
| 2506-7606-900 | J | PLATE,HANDLE MTG,PAINTED | 2.00 | EA | S7 | ^^^^^^ *42 |
| 2903-0250-003 | | SCREW,4-40 X 1/4 PFHM | 8.00 | EA | F4 | ^^^^^^ |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 2

ASSY NO. 7003-7540-000 | REVISION A | DESCRIPTION COMP ASSY,ATC-1400A | LAST ECN | DATE INC 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | *62 |
| 2903-0250-006 | | SCREW,4-40 X 1/4 PPHM | 4.00 | EA | F4 | ^^^^^^ *13 |
| 2904-0250-003 | | SCREW 6-32X1/4 PFHMS | 12.00 | EA | P4 | ^^^^^^ *41 |
| 2904-0500-003 | | SCREW,6-32 X 1/2 PFHM | 2.00 | EA | P4 | ^^^^^^ *37 |
| 2905-0250-006 | | SCREW 8-32X1/4 PBHMS | 8.00 | EA | P4 | ^^^^^^ *34 |
| 2905-0375-003 | | SCREW 8-32 X 3/8 PFHMS | 12.00 | EA | P4 | ^^^^^^ *44 |
| 2909-0313-003 | | SCREW,10-32 X 5/16 PFHM | 4.00 | EA | P4 | ^^^^^^ *20 |
| 2940-0000-002 | | WASHER,LOCK,INT TOOTH,8 | 4.00 | EA | F4 | ^^^^^^ *57 |
| 2950-0000-001 | | SPEED NUT TIMMERMAN C113S1632 | 8.00 | EA | P4 | ^^^^^^ *39 |
| 2901-0105-020 | -- | ATTEN, 20DB, 1W,SMA, 2 0GHZ | 1.00 | EA | P2 | ^^^^^^ ATT202 |
| 3107-3067-700 | A | INSUL,INTERFACE PCBA,FISHPAPER | 1.00 | EA | P3 | ^^^^^^ *53 |
| 3107-3068-100 | B | INSUL,MYLAR,5.5"X 5.5" | 1.00 | EA | P3 | ^^^^^^ *54 |
| 3107-3068-101 | A | INSUL,MYLAR,3.5"X 2.25" | 4.00 | EA | P3 | ^^^^^^ *55 |
| 3107-3068-102 | A | INSUL,MYLAR,3.5"X 6.0 | 2.00 | EA | P3 | ^^^^^^ *56 |
| 6004-6005-400 | | TY-RAP,4.0 LG | 25.00 | EA | F4 | ^^^^^^ *52 |
| 6042-3081-700 | A | COAX ASSY,SEMI-RIGID, 086 DIA | 1.00 | EA | S7 | ^^^^^^ *27 |
| 6042-3081-800 | B | COAX ASSY,SEMI-RIGID,.141 DIA | 1.00 | EA | S7 | ^^^^^^ *23 |
| 6042-3081-900 | A | COAX ASSY,SEMI-RIGID,.086 DIA | 1.00 | EA | S7 | ^^^^^^ *28 |

JUN 18 1987

ASSY NO 7003-7540-000 | REVISION A | DESCRIPTION COMP ASSY,ATC-1400A | LAST ECN | DATE INC 05/04/87

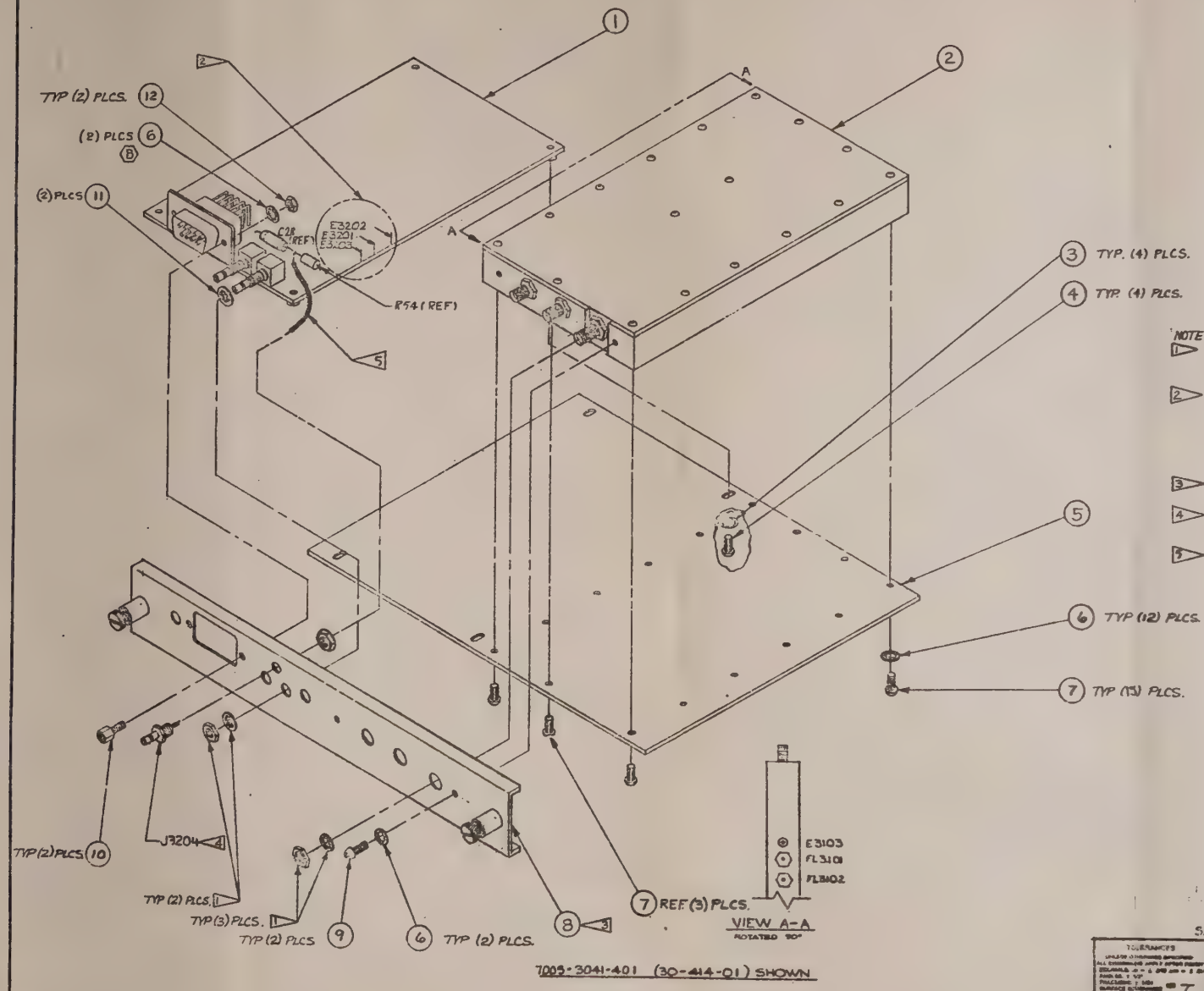
| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 6045-3082-300 | A | RIBBON CABLE ASSY,25 COND,58 2 | 1.00 | EA | M8 | *11 |
| 6050-0040-250 | E | COAX ASSY,FLEXIBLE,RG 316/U | 1.00 | EA | M8 | *22 |
| 6050-0040-570 | E | COAX ASSY,316,R F SMB/R F SMB | 1.00 | EA | M8 | *31 |
| 6050-0040-950 | E | COAX ASSY,316,R F SMB/R F SMB | 1.00 | EA | M8 | *32 |
| 6050-0041-420 | E | RG 316/U FLEX COAX ASSY | 1.00 | EA | M8 | *21 |
| 6050-0041-620 | E | COAX ASSY,316,R F SMB/R F SMB | 3.00 | EA | M8 | *30 |
| 6050-0320-720 | B | COAX ASSY,316,R F SMB/R F SMB | 2.00 | EA | M8 | *26 |
| 6050-0560-350 | B | COAX ASSY,316,R M SMA/R F SMB | 1.00 | EA | M8 | *29 |
| 6050-0560-900 | B | COAX ASSY,316,R M SMA/R F SMB | 1.00 | EA | M8 | *33 |
| 6500-3083-200 | A | MINOR ASSY,COVER,CARD CAGE*ASY | 1.00 | EA | S7 | *10 |
| 7005-3041-200 | A | MECH ASSY,COUNTER | 1.00 | EA | R8 | *16 |
| 7005-3041-401 | A | MECH ASSY, ALC/MIXER | 1.00 | EA | R8 | *19 |
| 7005-3043-700 | E | MECH ASSY,RF FREQ SYNTHESIZER | 1.00 | EA | R8 | *18 |
| 7005-3044-100 | A | MECH ASSY,DISCRIMINATOR | 1.00 | EA | R8 | *17 |
| 7005-3045-100 | C | MECH ASSY,200MHZ RF | 1.00 | EA | R8 | *02 |
| 7005-3045-501 | A | MECH ASSY,VIDEO | 1.00 | EA | R8 | *25 |
| 7005-3045-902 | A | MECH ASSY,FRONT PNL,UN PWR SUP | 1.00 | EA | R8 | *50 |
| 7005-3047-502 | A | MECH ASSY,FLOOR,UNVRSL PWR SUP | 1.00 | EA | R8 | |



ASSY NO 7003-7540-000 | REVISION A | DESCRIPTION COMP ASSY,ATC-1400A | LAST ECN | DATE INC 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | *01 |
| 7005-3048-001 | A | MECH ASSY,RF BULKHEAD | 1.00 | EA | R8 | *14 |
| 7010-3030-100 | A2 | PCB ASSY,DME RANGE | 1.00 | EA | M8 | *08 |
| 7010-3030-501 | A | PCB ASSY,TRANSPONDER PULSE | 1.00 | EA | M8 | *04 |
| 7010-3030-600 | D1 | PCB ASSY,DME TIMING | 1.00 | EA | M8 | *07 |
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | 1.00 | EA | M8 | *05 |
| 7010-3035-301 | A | PCB ASSY,INTERFACE | 1.00 | EA | M8 | *12 |
| 7010-3036-800 | A2 | PCB ASSY,DISPLAY DIMMER | 1.00 | EA | M8 | *24 |
| 7010-7530-100 | C | PCB ASSY PROCESSOR CONTROL | 1.00 | EA | M8 | *09 |
| 7010-7530-200 | A | PCB ASSY,DME REPLY | 1.00 | EA | M8 | *06 |
| 7010-7530-300 | A | PCB ASSY,TRANSPONDER CONTROL | 1.00 | EA | M8 | *03 |

| DATE | REV | CHANGE | APP'D |
|---|---|---|---|
| 6/1/87 | A | DESIGN RELEASE W 1220 | TL |




7005-3041-401 (30-414-01) SHOWN

NOTES:

1. HARDWARE SUPPLIED WITH CONNECTOR ON MECHANICAL ASSY (ITEM 2) AND PC BD ASSY (ITEM 1)
2. SOLDER E3201, E3202, & E3203, WIRES FROM PC BOARD ASS'Y (ITEM1) TO FL3101 FL3102 & E3103, RESPECTIVELY, OF MIXER ASS'Y (ITEM 2). THIS PROCEDURE IS TO BE DONE IN FINAL TEST.
3. FACE PLATE (ITEM 8) IS TO BE ASSEMBLED IN FINAL TEST.
4. INSTALL J3204 CONN. WITH NO LOCK WASHER ON FACE PLATE PRIOR TO ATTACHING FACE PLATE TO ASS'Y.
5. SOLDER WIRE FROM C28 & R54 TO J3204.

SEE SEPARATE B/M

TOLERANCES

| | | |
|---|---|---|
| DRAWN | AJ | 6-10-87 |
| ENGINEER | DWM | 6-11-87 |
| APPROVED | PWH | 6-14-87 |

- IFR INC -
WICHITA, KANSAS

TITLE: ALC / MIXER ASS'Y

ATC-1400-A 30-414-01

| SIZE | PROP NUMBER | REV |
|---|---|---|
| C | 7005-3041-401 | A |

SCALE 1:1 SHEET 1 OF 1

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 1

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7005-3041-401 | A | MECH ASSY, ALC/MIXER | | 05/04/87 |

| STAT | REF DES | QTY | COMP. PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | *01 | 1.00 | 7010-3031-401 | PCB ASSY,ALC | 87/04/22 | 99/99/99 |
| ACT | *02 | 1.00 | 7005-3041-500 | MECH ASSY,MIXER | 00/00/00 | 99/99/99 |
| ACT | *03 | 4.00 | 2840-0000-004 | WASHER LOCK,INT TOOTH,2 | 00/00/00 | 99/99/99 |
| ACT | *04 | 4.00 | 2801-0188-006 | SCREW 2-56 X 3/16 PBHMS | 00/00/00 | 99/99/99 |
| ACT | *05 | 1.00 | 2506-3066-000 | PLATE,MTG,ALC/MIXER | 00/00/00 | 99/99/99 |
| ACT | *06 | 16.00 | 2840-0000-003 | WASHER,LOCK,INT TOOTH,4 | 00/00/00 | 99/99/99 |
| ACT | *07 | 15.00 | 2803-0250-006 | SCREW,4-40 X 1/4 PPHM | 00/00/00 | 99/99/99 |
| ACT | *08 | 1.00 | 6500-3086-301 | MIN ..SY,FACE PLATE,ALC/MIX*ASY | 87/04/23 | 99/99/99 |
| ACT | *09 | 2.00 | 2803-0188-006 | SCREW,4-40 X 3/16 PPHM | 00/00/00 | 99/99/99 |
| ACT | *10 | 2.00 | 2850-7601-301 | SCREW, 188L4-40 19HH,4-40X.300 | 00/00/00 | 99/99/99 |
| ACT | *11 | 2.00 | 2840-0000-022 | WASHER 10 INT. LOCK | 00/00/00 | 99/99/99 |
| ACT | *12 | 2.00 | 2850-0000-020 | NUT,HEX,SMALL PAT,4-40 | 00/00/00 | 99/99/99 |
| ACT | J3204 | 1.00 | 2123-0000-038 | CONN,M SMB,W/TEPM.STR BULKHEAD | 87/05/01 | 99/99/99 |

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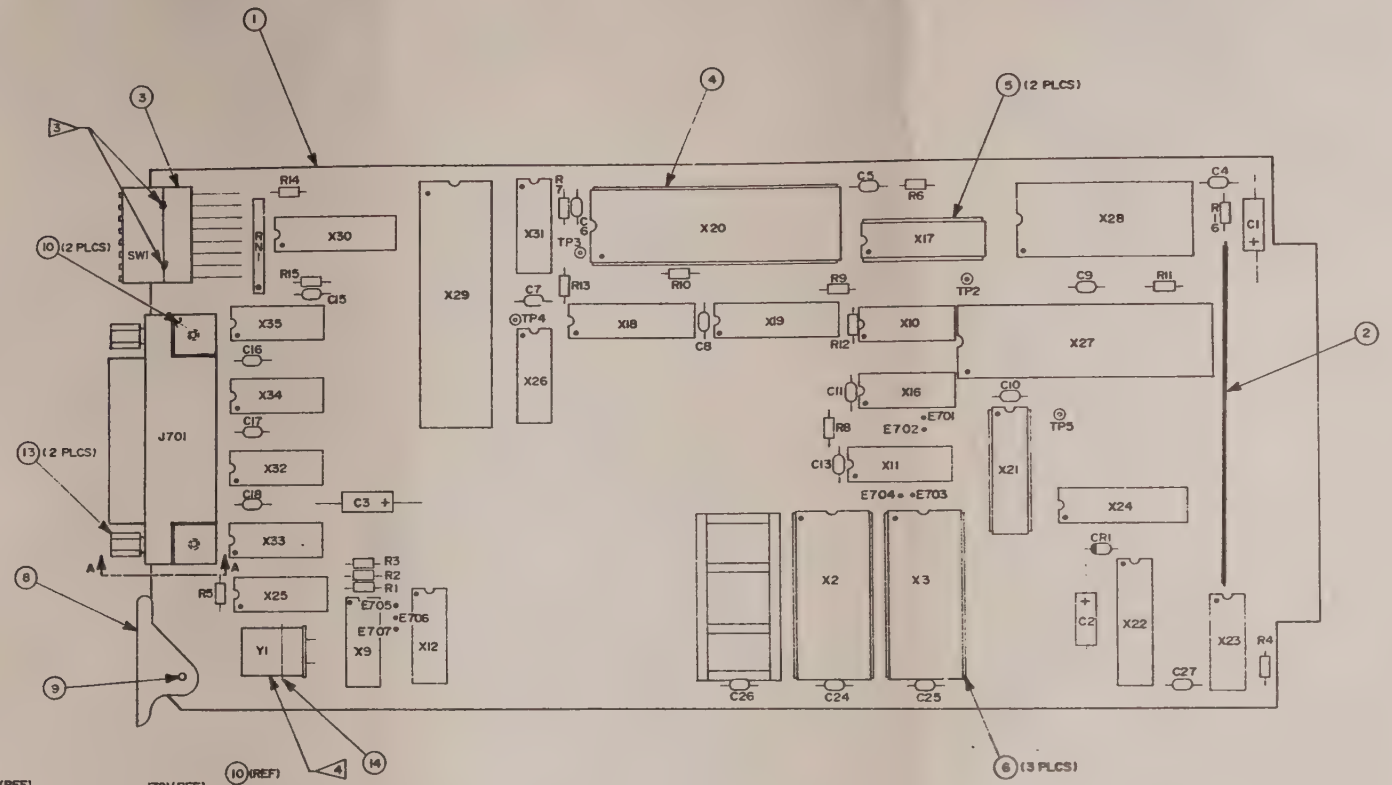
PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

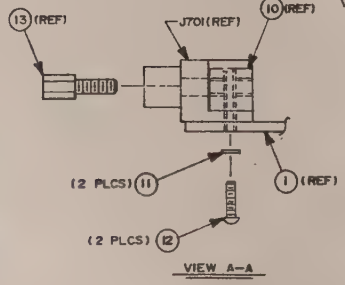
ASSY NO 7005-3041-401 REVISION A DESCRIPTION MECH ASSY, ALC/MIXER LAST ECN DATE INC 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 2123-0000-038 | | CONN,M SMB,U/TERM,STR BULKHEAD | 1.00 | EA | P2 | J3204 |
| 2506-3066-000 | A | PLATE,MTG,ALC/MIXER | 1.00 | EA | S7 | *05 |
| 2801-0183-006 | | SCREW 2-56 X 3/16 PBHMS | 4.00 | EA | F4 | *04 |
| 2803-0188-006 | | SCREW,4-40 X 3/16 PPHM | 2.00 | EA | F4 | *09 |
| 2803-0250-006 | | SCREW,4-40 X 1/4 PPHM | 15.00 | EA | F4 | *07 |
| 2840-0000-003 | | WASHER,LOCK,INT TOOTH,4 | 16.00 | EA | F4 | *06 |
| 2840-0000-004 | | WASHER,LCCK,INT TOOTH,2 | 4.00 | EA | F4 | *03 |
| 2840-0000-022 | | WASHER 10 INT LOCK | 2.00 | EA | P4 | *11 |
| 2850-0000-020 | | NUT,HEX,SMALL PAT,4-40 | 2.00 | EA | F4 | *12 |
| 2850-7601-301 | K | SCREW,.188L4-40.19HH,4-40X.380 | 2.00 | EA | F4 | *10 |
| 6500-3086-301 | A | MIN ASY,FACE PLATE,ALC/MIX+ASY | 1.00 | EA | S7 | *08 |
| 7005-3041-500 | C | MECH ASSY,MIXER | 1.00 | EA | M8 | *02 |
| 7010-3031-401 | A | PCB ASSY,ALC | 1.00 | EA | M8 | *01 |

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| | | |
|---|---|---|
| 8-16-87 | C | DESIGN RELEASE |



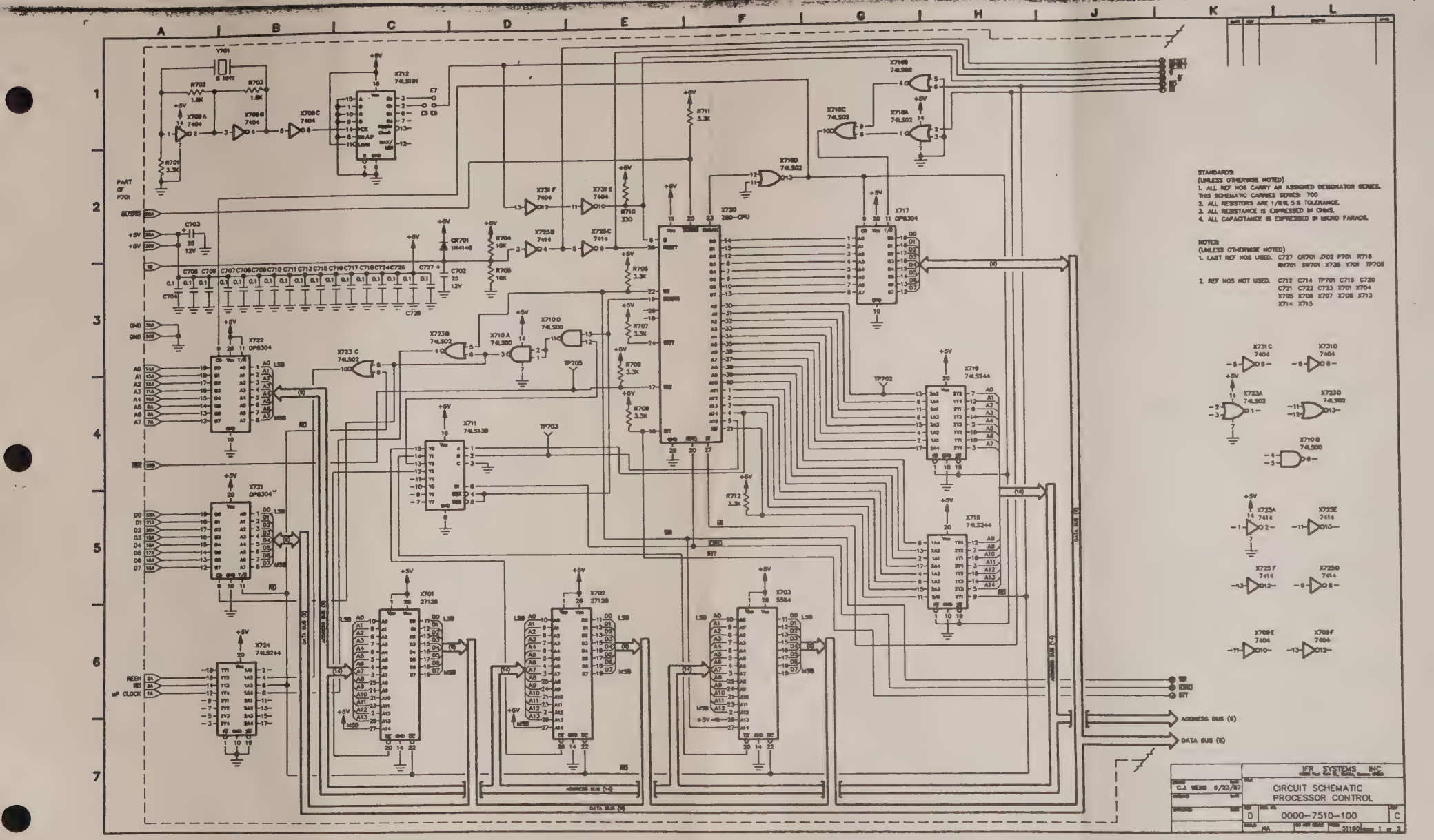

VIEW A-A

NOTES:

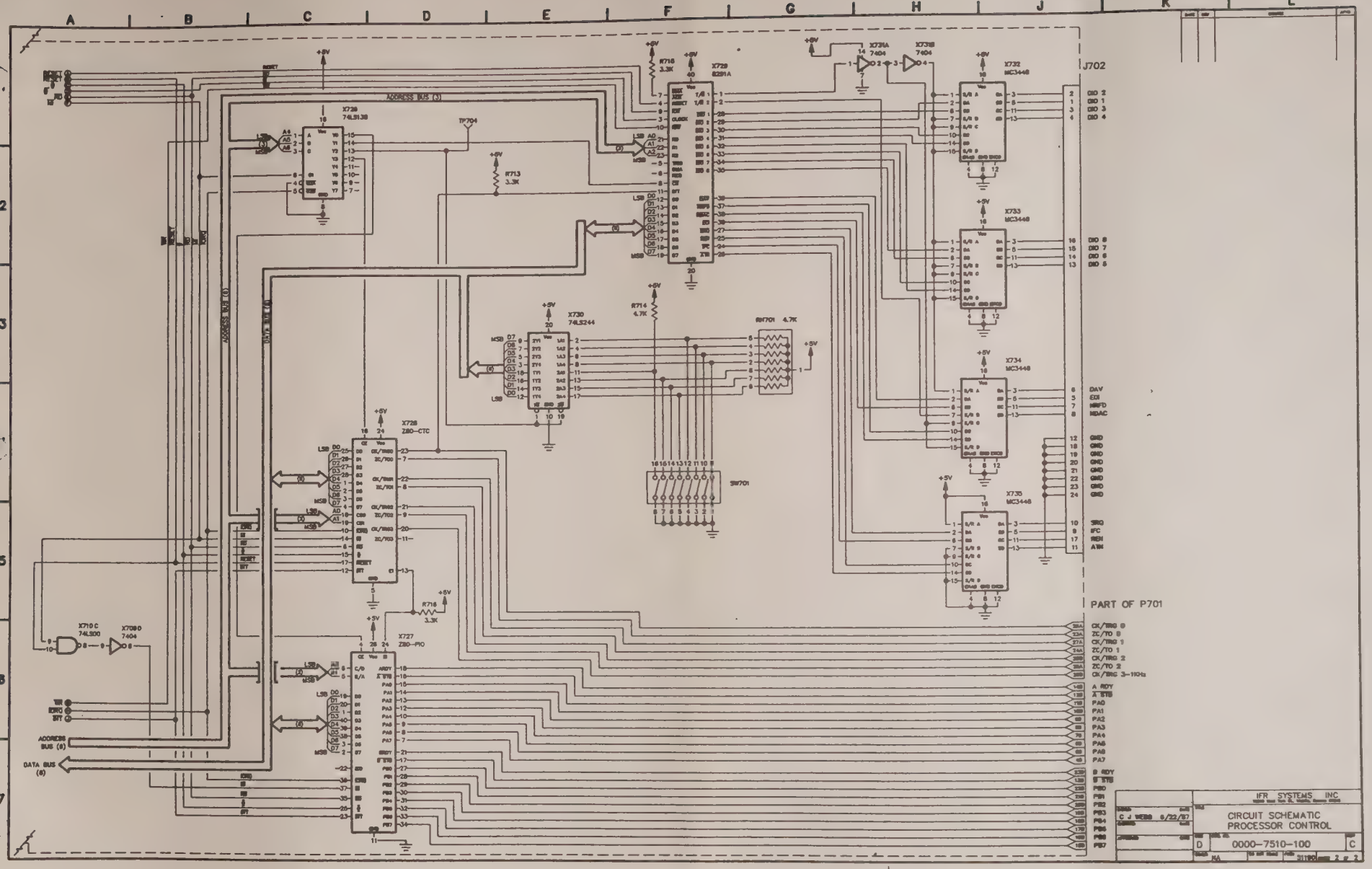
1. ALL REFERENCE DESIGNATORS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS DRAWING CARRIES SERIES 700 (ie. R1 IS R701)
2. REF SCHEMATIC: 0000-7510-100
   REF DRILL DWG: 1700-7520-100
3. TAK PAK (DPN 1051-0100-100) SOCKET (ITEM 3) TO SW1, 2 PLCS AS SHOWN.
4. CRYSTAL CASE MUST NOT BE HEATED. DO NOT ALLOW SOLDER TO FLOW OR COME IN CONTACT WITH CRYSTAL CASE.

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| | | |
|---|---|---|
| SIGLER 6/1/87 | | PCB ASS'Y, MICROPROCESSER |
| | D | 7010-7530-100 C |
| | 2:1 | |


STANDARDS:
(UNLESS OTHERWISE NOTED)
1. ALL REF NOS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES: 700
2. ALL RESISTORS ARE 1/8 W, 5 % TOLERANCE.
3. ALL RESISTANCE IS EXPRESSED IN OHMS.
4. ALL CAPACITANCE IS EXPRESSED IN MICRO FARADS.
NOTES:
(UNLESS OTHERWISE NOTED)
1. LAST REF NOS USED. C727 CR701 J702 P701 R718 R4701 S1701 X738 Y701 TP705
2. REF NOS NOT USED. C712 C714 TP701 C719 C720 C721 C722 C723 X701 X704 X705 X708 X707 X708 X713 X714 X715
IFR SYSTEMS INC
CIRCUIT SCHEMATIC
PROCESSOR CONTROL
0000-7510-100
D
C
SHEET 1 OF 2

JUN 18 1987


J702
PART OF P701
IFR SYSTEMS INC
CIRCUIT SCHEMATIC
PROCESSOR CONTROL
0000-7510-100
C J WEBB 6/22/87

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-7530-100 | C | PCB ASSY PROCESSOR CONTROL | 457A | 05/29/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 0002-0000-000 | | *** REF DESIG NOT USED *** | 17.00 | EA | F | /\/\/\/\/\<br>C712<br>C714<br>C719<br>C720<br>C721<br>C722<br>C723<br>TP701<br>X701<br>X704<br>X705<br>X706<br>X707<br>X708<br>X713<br>X714<br>X715 |
| 1050-0000-074 | | WIRE,BUS,TINNED COPPER,24GA | .00 | SP | F5 | /\/\/\/\/\<br>#14 |
| 1521-0000-008 | | CAP,UF .10, 50V,DIP,ZSU | 17.00 | EA | P3 | /\/\/\/\/\<br>C704<br>C705<br>C706<br>C707<br>C708<br>C709<br>C710<br>C711<br>C713<br>C715<br>C716<br>C717<br>C718<br>C724<br>C725<br>C726<br>C727 |
| 1580-2202-016 | -- | CAP,UF, 22, 16V ,ELE 20 | 3.00 | EA | P3 | /\/\/\/\/\<br>C701<br>C702<br>C703 |
| 1700-7520-100 | C | PC BD PROCESSOR CONTROL | 1.00 | EA | P6 | /\/\/\/\/\<br>#01 |
| 2100-1691-700 | C | MOUNTING BRACKET | 2.00 | EA | S7 | /\/\/\/\/\<br>#10 |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 2

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-7530-100 | C | PCB ASSY PROCESSOR CONTROL | 457A | 05/29/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 2106-0000-007 | | TERM,GND,USECO 90E1B-5 OR -T | 4.00 | EA | F4 | /\/\/\/\/\<br>TP702<br>TP703<br>TP704<br>TP705 |
| 2108-0000-008 | | PIN FOR S-203 EJECTOR N/C | 1.00 | EA | P4 | /\/\/\/\/\<br>#09 |
| 2116-0000-029 | | CONN FEMALE 24 PIN 552791-1 | 1.00 | EA | P2 | /\/\/\/\/\<br>J701 |
| 2363-0100-000 | | XTAL 8.000000MHZ,F F,HC-18/U | 1.00 | EA | P3 | /\/\/\/\/\<br>Y701 |
| 2801-0500-006 | | SCREW 2-56 X 1/2 PBHMS | 2.00 | EA | F4 | /\/\/\/\/\<br>#12 |
| 2840-0000-004 | | WASHER,LOCK,INT TOOTH,2 | 2.00 | EA | F4 | /\/\/\/\/\<br>#11 |
| 2850-1692-600 | B | SCREW,.340L3S-6.25MM,4-40X.410 | 2.00 | EA | S7 | /\/\/\/\/\<br>#13 |
| 3101-0000-007 | | SOCKET ICN-203-S3G | 2.00 | EA | P2 | /\/\/\/\/\<br>#05 |
| 3101-0000-024 | | SOCKET 16-823-90 | 1.00 | EA | P2 | /\/\/\/\/\<br>#03 |
| 3101-0000-029 | | SOCKET,28-P DIP,GOLD,LO PROFIL | 3.00 | EA | P2 | /\/\/\/\/\<br>#06 |
| 3101-0500-020 | | SOCKET,40-P DIP,ICN-406-S5-G | 1.00 | EA | P2 | /\/\/\/\/\<br>#04 |
| 3130-0000-003 | | IC,7404,HEX INVERTER | 2.00 | EA | P2 | /\/\/\/\/\<br>X709<br>X731 |
| 3131-0000-030 | | IC,74LS191,BIN SYN U/D COUNTER | 1.00 | EA | P2 | /\/\/\/\/\<br>X712 |
| 3131-0000-032 | | IC,74LS02,QUAD 2-INPUT NOR | 2.00 | EA | P2 | /\/\/\/\/\<br>X716<br>X723 |
| 3131-0000-044 | | IC,74LS00,QUAD 2-INPUT NAND | 1.00 | EA | P2 | /\/\/\/\/\<br>X710 |
| 3131-0000-045 | | IC,74LS138,3-TO-8 DCDR/MPLXR | 2.00 | EA | P2 | /\/\/\/\/\<br>X711 |

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PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 3

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-7530-100 | C | PCB ASSY PROCESSOR CONTROL | 457A | 05/29/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | X726 |
| 3134-0000-015 | | IC,3448A,QUAD 3-STATE BUS XCVR | 4.00 | EA | P2 | X732<br>X733<br>X734<br>X735 |
| 3135-0000-016 | | IC,7414,INV HEX SCHMITT TRIG | 1.00 | EA | P2 | X725 |
| 3135-0000-025 | | IC,80-CPU,16-BIT UPROCESSOR | 1.00 | EA | P2 | X720 |
| 3211-3244-000 | | IC,74LS244,OCTAL BUF/DRVR/RCVR | 4.00 | EA | P2 | X718<br>X719<br>X724<br>X730 |
| 3226-0002-000 | | IC,80-CTC,4-CH COUNTER/TIMER | 1.00 | EA | P2 | X728 |
| 3250-5001-000 | | IC,8304,8-BIT BIDI TRANSCEIVER | 3.00 | EA | P2 | X717<br>X721<br>X722 |
| 3251-0001-000 | | IC,80-PIO,I/O INTF CONTROLLER | 1.00 | EA | P2 | X727 |
| 3260-1004-000 | | IC,HS CMOS,8192 X 8 STATIC RAM | 1.00 | EA | P2 | X703 |
| 3271-0002-000 | -- | IC,8291A,GPIB TALKER/LISTENER | 1.00 | EA | P2 | X729 |
| 3271-2712-880 | A | IC,27128,16K*8-B EPROM,250NS | 1.00 | EA | P2 | |
| 3271-7501-200 | | IC,27128,ATC-1400A V 2 C | 00 | EA | MB | *X702 |
| 4104-0000-002 | | CARD GUIDE & EJECTOR S-203 | 1.00 | EA | P3 | *08 |
| 4690-0747-200 | | RES NET,SIP,BUSS,4.7K OHM, 8-P | 1.00 | EA | P4 | RN701 |
| 4701-0103-003 | | RES, S, 1/8W, 10K OHM | 2.00 | EA | P4 | R704<br>R705 |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 4

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-7530-100 | C | PCB ASSY PROCESSOR CONTROL | 457A | 05/29/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 4701-0182-003 | | RES, S, 1/8W, 1.8K OHM | 2.00 | EA | P4 | R702<br>R703 |
| 4701-0331-003 | | RES, S, 1/8W, 330 OHM | 1.00 | EA | P4 | R710 |
| 4701-0332-003 | | RES, S, 1/8W, 3.3K OHM | 10.00 | EA | P4 | R706<br>R707<br>R708<br>R709<br>R711<br>R712<br>R713<br>R715<br>R716 |
| 4701-0472-003 | | RES, S, 1/8W, 4.7K OHM | 1.00 | EA | P4 | R714 |
| 4815-0000-003 | | DIODE, 1N4148 ,SIGNAL, 75PRV | 1.00 | EA | P2 | CR701 |
| 5115-0000-008 | | SWITCH 4351665 | 1.00 | EA | P4 | SW701 |
| 6062-0000-001 | | WIRE,HOOK,TFE,22GA, 7S,BLACK | .50 | FT | FS | *02 |

JUN 18 1987

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG. PAGE 1

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-7530-100 REVISION C
DESCRIPTION PCB ASSY PROCESSOR CONTROL
LAST ECN 457A DATE INC 05/29/87

| STAT | REF.DES. | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | | 1.00 | 3271-2712-300 | IC,27128,16K*8-B EPROM,250NS | 87/04/10 | 99/99/99 |
| ACT | *01 | 1.00 | 1700-7520-100 | PC BD PROCESSOR CONTROL | 87/04/10 | 99/99/99 |
| ACT | *02 | 50 | 6002-0000-001 | WIRE,HOOK,TFE.22GA, 7S,BLACK | 87/05/27 | 99/99/99 |
| ACT | *03 | 1.00 | 3101-0000-024 | SOCKET 16-823-90 | 87/05/27 | 99/99/99 |
| ACT | *04 | 1.00 | 3101-0500-020 | SOCKET,40-P DIP,ICN-406-SS-G | 00/00/00 | 99/99/99 |
| ACT | *05 | 2.00 | 3101-0000-007 | SOCKET ICN-203-S3G | 00/00/00 | 99/99/99 |
| ACT | *06 | 3.00 | 3101-0000-029 | SOCKET,28-P DIP,GOLD,LO PROFIL | 87/04/10 | 99/99/99 |
| ACT | *08 | 1.00 | 4104-0000-002 | CARD GUIDE & EJECTOR S-203 | 00/00/00 | 99/99/99 |
| ACT | *09 | 1.00 | 3108-0000-003 | PIN FOR S-203 EJECTOR N/C | 00/00/00 | 99/99/99 |
| ACT | *10 | 2.00 | 2100-1691-700 | MOUNTING BRACKET | 00/00/00 | 99/99/99 |
| ACT | *11 | 2.00 | 2840-0000-034 | WASHER,LOCK,INT TOOTH,2 | 00/00/00 | 99/99/99 |
| ACT | *12 | 2.00 | 2801-0500-006 | SCREW 2-56 X 1/2 PBHMS | 00/00/00 | 99/99/99 |
| ACT | *13 | 2.00 | 2850-1692-600 | SCREW, 340L35-6.25MH,4-40X 410 | 00/00/00 | 99/99/99 |
| ACT | *14 | .00 | 1050-0000-074 | WIRE,BUS,TINNED COPPER,24GA | 87/06/02 | 99/99/99 |
| ACT | *X702 | .00 | 3271-7501-200 | IC,27128,ATC-1400A V 2 8 | 87/04/10 | 99/99/99 |
| ACT | C701 | 3.00 | 1580-2202-016 | CAP,UF, 22, 16V ,ELE 20 | 87/03/05 | 99/99/99 |
| ACT | C702 | -.-- | 1580-2202-016 | CAP,UF, 22, 16V ,ELE 20 | 87/03/05 | 99/99/99 |
| ACT | C703 | -.-- | 1580-2202-016 | CAP,UF, 22, 16V ,ELE 20 | 87/03/05 | 99/99/99 |
| ACT | C704 | 17.00 | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C705 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C706 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C707 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C708 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C709 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C710 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C711 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG. PAGE 2

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-7530-100 REVISION C
DESCRIPTION PCB ASSY PROCESSOR CONTROL
LAST ECN 457A DATE INC 05/29/87

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | C712 | 17.00 | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | C713 | -.-- | 1521-0000-008 | CAP,UF .10, 50V DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C714 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | C715 | -.-- | 1521-0000-008 | CAP,UF .10, 50V.DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C716 | -.-- | 1521-0000-008 | CAP,UF .10, 50V.DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C717 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C718 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C719 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | C720 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | C721 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | C722 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | C723 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | C724 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C725 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C726 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C727 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | CR701 | 1.00 | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | J701 | 1.00 | 2116-0000-029 | CONN FEMALE 24 PIN 552791-1 | 00/00/00 | 99/99/99 |
| ACT | R701 | 10.00 | 4701-0332-003 | RES, 5, 1/8W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R702 | 2.00 | 4701-0182-003 | RES, 5, 1/8W, 1.8K OHM | 87/04/10 | 99/99/99 |
| ACT | R703 | -.-- | 4701-0182-003 | RES, 5, 1/8W, 1.8K OHM | 87/04/10 | 99/99/99 |
| ACT | R704 | 2.00 | 4701-0103-003 | RES, 5, 1/8W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R705 | -.-- | 4701-0103-003 | RES, 5, 1/8W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R706 | -.-- | 4701-0332-003 | RES, 5, 1/8W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R707 | -.-- | 4701-0332-003 | RES, 5, 1/8W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R708 | -.-- | 4701-0332-003 | RES, 5, 1/8W, 3.3K OHM | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/16 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 3

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-7530-100 | C | PCB ASSY PROCESSOR CONTROL | 457A | 05/29/87 |

| STAT | REF.DES. | QTY | COMP. PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R709 | -.-- | 4701-0332-003 | RES, S, 1/8W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R710 | 1.00 | 4701-0331-003 | RES, S, 1/8W, 330 OHM | 00/00/00 | 99/99/99 |
| ACT | R711 | -.-- | 4701-0332-003 | RES, S, 1/8W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R712 | -.-- | 4701-0332-003 | RES, S, 1/8W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R713 | -.-- | 4701-0332-003 | RES, S, 1/8W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R714 | 1.00 | 4701-0472-003 | RES, S, 1/8W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R715 | -.-- | 4701-0332-003 | RES, S, 1/8W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R716 | -.-- | 4701-0332-003 | RES, S, 1/8W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | RN701 | 1.00 | 4690-0747-200 | RES NET,SIP;BUSS,4.7K OHM, 8-P | 00/00/00 | 99/99/99 |
| ACT | SW701 | 1.00 | 5115-0000-008 | SWITCH 435166S | 87/06/04 | 99/99/99 |
| ACT | TP701 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | TP702 | 4.00 | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP703 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP704 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP705 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 87/06/04 | 99/99/99 |
| ACT | X701 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/04/10 | 99/99/99 |
| ACT | X703 | 1.00 | 3260-1004-000 | IC,HS CMOS,8192 X 8 STATIC RAM | 87/06/04 | 99/99/99 |
| ACT | X704 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | X705 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | X706 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | X707 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | X708 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | X709 | 2.00 | 3130-0000-003 | IC,7404,HEX INVERTER | 00/00/00 | 99/99/99 |
| ACT | X710 | 1.00 | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X711 | 2.00 | 3131-0000-045 | IC,74LS138,3-TO-8 DCDR/MPLXR | 00/00/00 | 99/99/99 |
| ACT | X712 | 1.00 | 3131-0000-030 | IC,74LS191,BIN SYN U/D COUNTER | 87/04/10 | 99/99/99 |

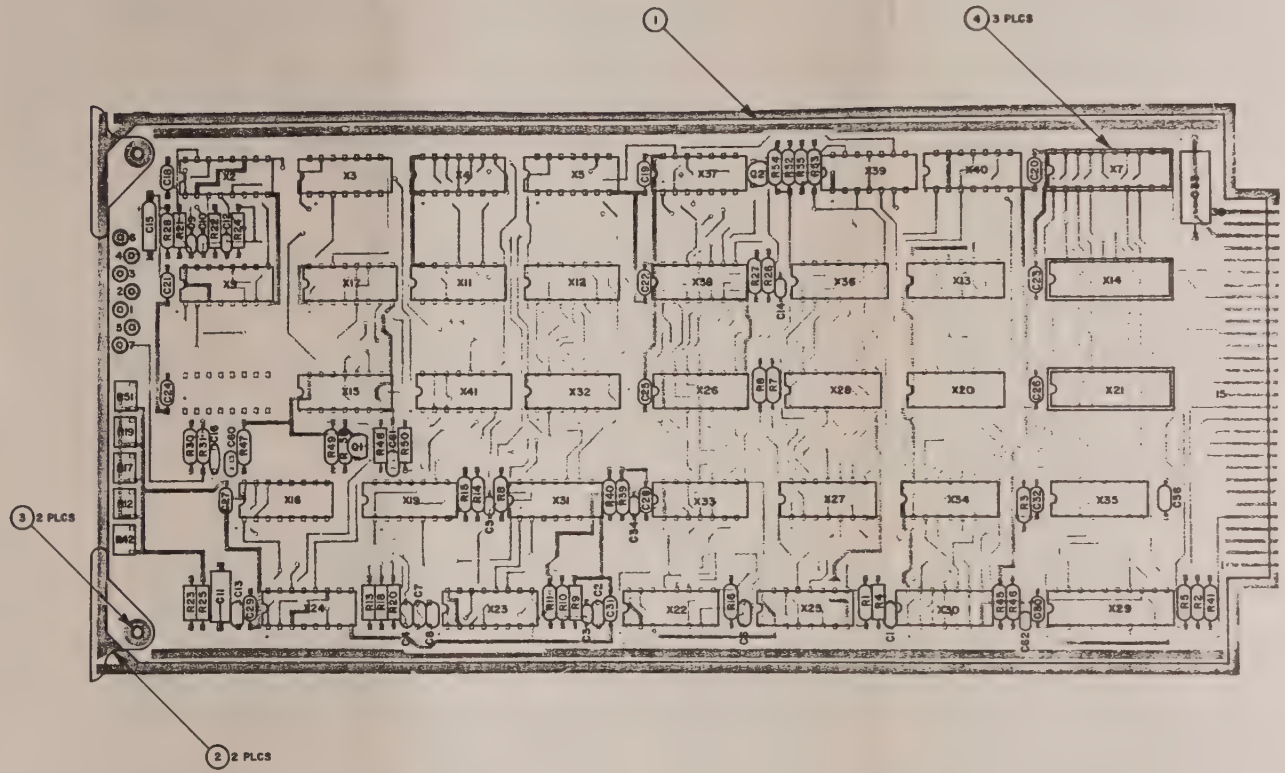
PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 4

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-7530-100 | C | PCB ASSY PROCESSOR CONTROL | 457A | 05/29/87 |

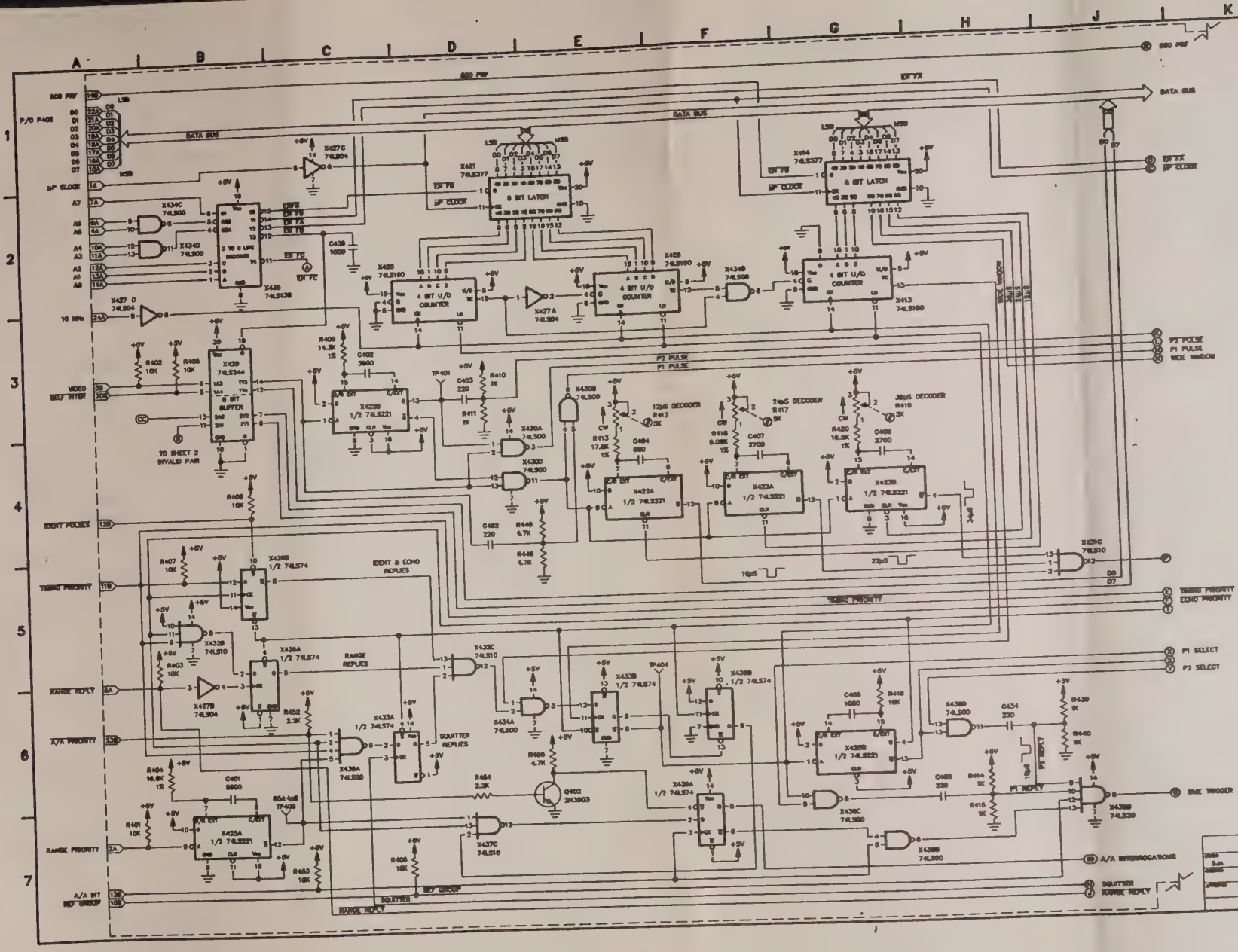
| STAT | REF.DES. | QTY | COMP. PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | X713 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | X714 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | X715 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 87/06/04 | 99/99/99 |
| ACT | X716 | 2.00 | 3131-0000-032 | IC,74LS02,QUAD 2-INPUT NOR | 00/00/00 | 99/99/99 |
| ACT | X717 | 3.00 | 3250-5001-000 | IC,8304,8-BIT BIDI TRANSCEIVER | 00/00/00 | 99/99/99 |
| ACT | X718 | 4.00 | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X719 | -.-- | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X720 | 1.00 | 3135-0000-025 | IC,80-CPU,16-BIT UPROCESSOR | 00/00/00 | 99/99/99 |
| ACT | X721 | -.-- | 3250-5001-000 | IC,8304,8-BIT BIDI TRANSCEIVER | 00/00/00 | 99/99/99 |
| ACT | X722 | -.-- | 3250-5001-000 | IC,8304,8-BIT BIDI TRANSCEIVER | 00/00/00 | 99/99/99 |
| ACT | X723 | -.-- | 3131-0000-032 | IC,74LS02,QUAD 2-INPUT NOR | 00/00/00 | 99/99/99 |
| ACT | X724 | -.-- | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X725 | 1.00 | 3135-0000-016 | IC,7414,INV HEX SCHMITT TRIG | 00/00/00 | 99/99/99 |
| ACT | X726 | -.-- | 3131-0000-045 | IC,74LS138,3-TO-8 DCDR/MPLXR | 00/00/00 | 99/99/99 |
| ACT | X727 | 1.00 | 3251-0001-000 | IC,80-PIC,I/O INTF CONTROLLER | 00/00/00 | 99/99/99 |
| ACT | X728 | 1.00 | 3226-0002-000 | IC,80-CTC,4-CH COUNTER/TIMER | 00/00/00 | 99/99/99 |
| ACT | X729 | 1.00 | 3271-0002-000 | IC,8291A,GPIB TALKER/LISTENER | 00/00/00 | 99/99/99 |
| ACT | X730 | -.-- | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X731 | -.-- | 3130-0000-003 | IC,7404,HEX INVERTER | 00/00/00 | 99/99/99 |
| ACT | X732 | 4.00 | 3134-0000-015 | IC,3448A,QUAD 3-STATE BUS XCVR | 00/00/00 | 99/99/99 |
| ACT | X733 | -.-- | 3134-0000-015 | IC,3448A,QUAD 3-STATE BUS XCVR | 00/00/00 | 99/99/99 |
| ACT | X734 | -.-- | 3134-0000-015 | IC,3448A,QUAD 3-STATE BUS XCVR | 00/00/00 | 99/99/99 |
| ACT | X735 | -.-- | 3134-0000-015 | IC,3448A,QUAD 3-STATE BUS XCVR | 00/00/00 | 99/99/99 |
| ACT | Y701 | 1.00 | 2363-0100-000 | XTAL, 8.000000MHZ,F P,HC-18/U | 87/04/10 | 99/99/99 |

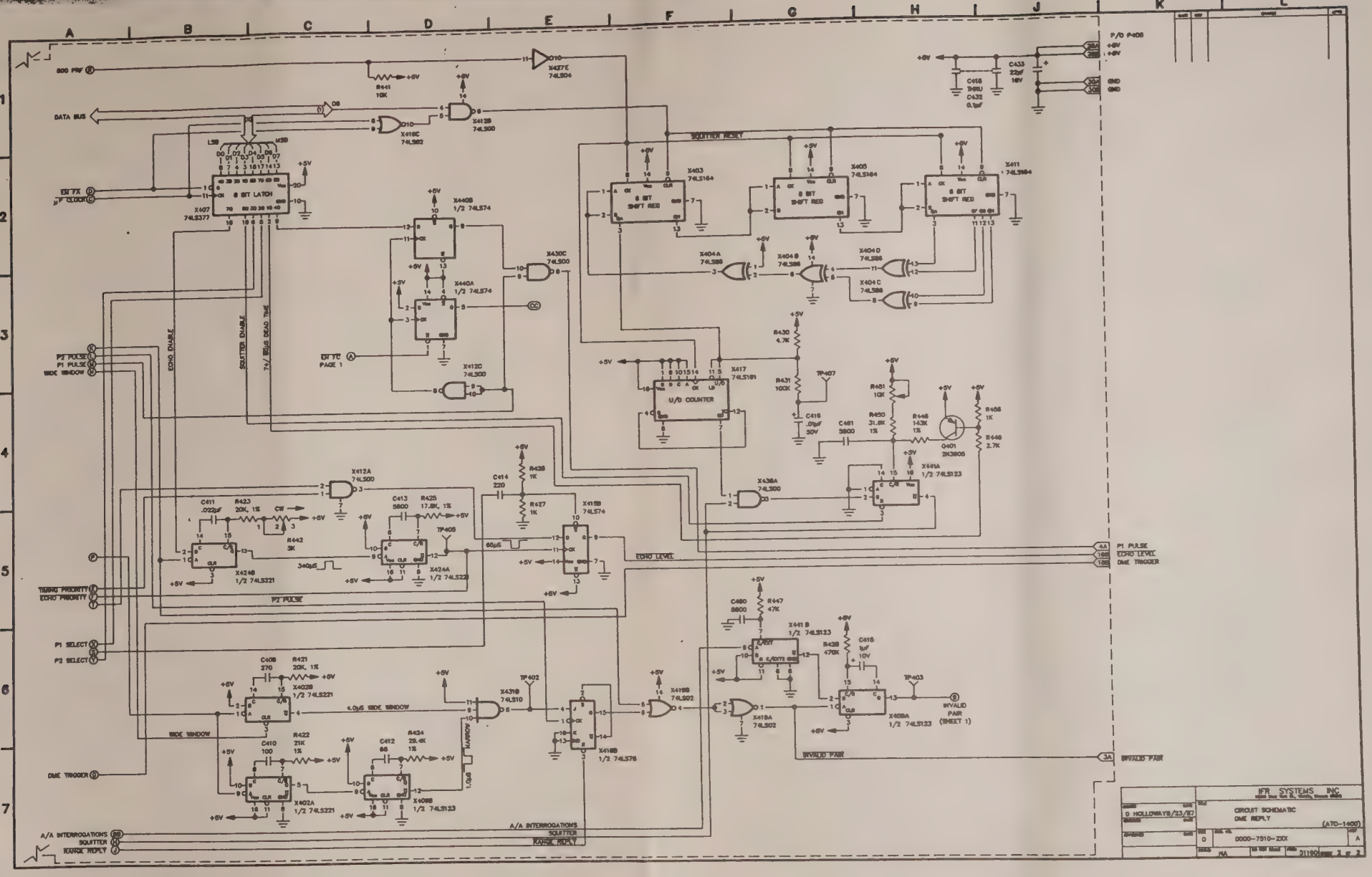
| REV | | DESCRIPTION |
|---|---|---|
| A | | DESIGN RELEASE |




NOTE
THIS PC BD ASSY CARRIES AN ASSIGNED REF DES SERIES OF 400 (i.e. R1 IS R401)

| | | |
|---|---|---|
| DRAWN | CHPS 6-19-87 | GPS SYSTEMS INC. |
| ENGINEER | C.K. MARKS 6/20/87 | TITLE: PC BD ASSY ATC-1400A DME REPLY |
| APPROVED | PR Thomas 7/6/87 | SIZE D · DWG. NO. 7010-7530-200 · REV A |
| | | SCALE 2:1 · SHEET 1 OF 1 |


DATA BUS
P2 PULSE
P1 PULSE
WIDE WINDOW
TIMING PRIORITY
ECHO PRIORITY
RANGE PRIORITY
A/A PRIORITY
P1 SELECT
P2 SELECT
DME TRIGGER
A/A INTERROGATIONS
SQUITTER
RANGE REPLY
A/A INT
REF GROUP
IDENT PULSE
VIDEO
SELF INTER
10 MHz
IDENT & ECHO REPLIES
RANGE REPLIES
SQUITTER REPLIES
TO SHEET 2
8VVALID PAIR
12µS DECODER
20µS DECODER
38µS DECODER
IFR SYSTEM
CIRCUIT SCHEMATIC
DME REPLY
0000-7510-2001
JUN 18


800 PRF
DATA BUS
EXT'X
EXT'Y
CLOCK
8 BIT LATCH
X407 74LS377
R441 10K
X427E 74LS04
X412B 74LS00
X418C 74LS02
X440B 1/2 74LS74
X440A 1/2 74LS74
X430C 74LS00
X412C 74LS00
EXT'Y C PAGE 1
SQUITTER RESET
X403 74LS164
X405 74LS164
X411 74LS164
8 BIT SHIFT REG
X404A 74LS86
X404B 74LS86
X404D 74LS86
X404C 74LS86
X417 74LS191
U/D COUNTER
R430 4.7K
R431 100K
TP407
R451 10K
R450 31.6K 1%
R448 143K 1%
R456 1K
R449 2.7K
C416 .01µF 50V
C481 3800
Q401 2N3906
X441A 1/2 74LS123
X438A 74LS00
P/O P408
C418 .1µF
C432 0.1µF
C433 22µF 16V
+5V
GND
P2 PULSE
P1 PULSE
WIDE WINDOW
ECHO ENABLE
SQUITTER ENABLE
74/ BUS DEAD TIME
TIMING PRIORITY
ECHO PRIORITY
P1 SELECT
P2 SELECT
DME TRIGGER
A/A INTERROGATIONS
SQUITTER
RANGE REPLY
X412A 74LS00
C411 .022µF
R423 20K, 1% CW
R442 3K
X424B 1/2 74LS221
C413 3800
R425 17.8K, 1%
X424A 1/2 74LS221
TP405
340µS
C414 220
R426 1K
R427 1K
X415B 74LS74
65µS
ECHO LEVEL
C408 270
R421 20K, 1%
X402B 1/2 74LS221
4.0µS WIDE WINDOW
C410 100
R422 21K 1%
X402A 1/2 74LS221
C412 68
R424 28.4K 1%
X409B 1/2 74LS123
NARROW
1.0µS
X431B 74LS10
TP402
X418B 74LS76
X418B 74LS02
C480 3800
R447 47K
X441B 1/2 74LS123
R428 470K
C415 1µF 10V
TP403
X409A 1/2 74LS123
X418A 74LS02
INVALID PAIR (SHEET 1)
INVALID PAIR
P1 PULSE
ECHO LEVEL
DME TRIGGER
IFR SYSTEMS INC
CIRCUIT SCHEMATIC
DME REPLY
(ATD-1400)
0000-7310-200
A
0 HOLLOWAY/8/23/87
MA
311190

JUN 18 1987

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 1

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO. 7010-7530-200 REVISION A DESCRIPTION PCB ASSY,DME REPLY LAST ECN # 469 DATE INC 06/15/87

| STAT | REF DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | *01 | 1.00 | 1700-7520-200 | PC BD,DME REPLY | 87/04/23 | 99/99/99 |
| ACT | *02 | 2.00 | 4184-0000-002 | CARD GUIDE & EJECTOR S-203 | 00/00/00 | 99/99/99 |
| ACT | *03 | 2.00 | 2108-0000-008 | PIN FOR S-203 EJECTOR N/C | 00/00/00 | 99/99/99 |
| ACT | *04 | 3.00 | 3101-0000-007 | SOCKET ICN-203-S3G | 00/00/00 | 99/99/99 |
| ACT | C401 | 4.00 | 1506-0562-017 | CAP,PF 5600, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C402 | 1.00 | 1506-0392-017 | CAP,PF 3900, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C403 | 5.00 | 1506-0221-017 | CAP,PF 220, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C404 | 1.00 | 1506-0681-017 | CAP,PF 680, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C405 | -.-- | 1506-0221-017 | CAP,PF 220, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C406 | 2.00 | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C407 | 2.00 | 1506-0272-017 | CAP,PF 2700, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C408 | -.-- | 1506-0272-017 | CAP,PF 2700, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C409 | 1.00 | 1506-0271-017 | CAP,PF 270, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C410 | 1.00 | 1506-0101-017 | CAP,PF, 100, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C411 | 1.00 | 1502-0223-006 | CAP,UF .022, 100V,MPC, 5 | 00/00/00 | 99/99/99 |
| ACT | C412 | 1.00 | 1506-0680-017 | CAP,PF 68, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C413 | -.-- | 1506-0562-017 | CAP,PF 5600, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C414 | -.-- | 1506-0221-017 | CAP,PF 220, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C415 | 1.00 | 1507-0105-023 | CAP,UF 1.0, 10V,TANT, 20 | 00/00/00 | 99/99/99 |
| ACT | C416 | 1.00 | 1501-0103-005 | CAP,UF .010, 50V,DISC, 10 | 00/00/00 | 99/99/99 |
| ACT | C418 | 15.00 | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C419 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C420 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C421 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C422 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C423 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 2

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO. 7010-7530-200 REVISION A DESCRIPTION PCB ASSY,DME REPLY LAST ECN # 469 DATE INC 06/15/87

| STAT | REF DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | C424 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C425 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C426 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C427 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C428 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C429 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C430 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C431 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C432 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C433 | 1.00 | 1580-2206-016 | CAP,UF, 22, 16V ,ELE 20 | 87/03/05 | 99/99/99 |
| ACT | C434 | -.-- | 1506-0221-017 | CAP,PF 220, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C436 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C460 | -.-- | 1506-0562-017 | CAP,PF 5600, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C461 | -.-- | 1506-0562-017 | CAP,PF 5600, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C462 | -.-- | 1506-0221-017 | CAP,PF 220, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | Q401 | 1.00 | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 87/04/23 | 99/99/99 |
| ACT | Q402 | 1.00 | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 87/04/23 | 99/99/99 |
| ACT | R401 | 9.00 | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R402 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R403 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R404 | 1.00 | 4706-1692-001 | RES, 1, 1/4W, 16.9K OHM | 00/00/00 | 99/99/99 |
| ACT | R405 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R406 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R407 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R408 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R409 | 1.00 | 4706-1432-001 | RES, 1, 1/4W, 14.3K OHM | 00/00/00 | 99/99/99 |

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-7530-200 | REVISION A | DESCRIPTION PCB ASSY,DME REPLY | LAST ECN # 469 | DATE INC 06/15/87

| STAT | REF.DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R410 | 9.00 | 4702-0102-003 | RES, S, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R411 | -.-- | 4702-0102-003 | RES, S, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R412 | 4.00 | 4753-0502-002 | POT, 5K OHM, 62-2-1-502 | 00/00/00 | 99/99/99 |
| ACT | R413 | 2.00 | 4706-1782-001 | RES, 1, 1/4W, 17.8K OHM | 00/00/00 | 99/99/99 |
| ACT | R414 | -.-- | 4702-0102-003 | RES, S, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R415 | -.-- | 4702-0102-003 | RES, S, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R416 | 1.00 | 4702-0183-003 | RES, S, 1/4W, 18K OHM | 00/00/00 | 99/99/99 |
| ACT | R417 | -.-- | 4753-0502-002 | POT, 5K OHM, 62-2-1-502 | 00/00/00 | 99/99/99 |
| ACT | R418 | 1.00 | 4706-9091-001 | RES, 1, 1/4W, 9.09K OHM | 87/04/23 | 99/99/99 |
| ACT | R419 | -.-- | 4753-0502-002 | POT, 5K OHM, 62-2-1-502 | 00/00/00 | 99/99/99 |
| ACT | R420 | 1.00 | 4706-1652-001 | RES, 1, 1/4W, 16.5K OHM | 00/00/00 | 99/99/99 |
| ACT | R421 | 2.00 | 4706-2002-001 | RES, 1, 1/4W, 20.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R422 | 1.00 | 4706-2102-001 | RES, 1, 1/4W, 21.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R423 | -.-- | 4706-2002-001 | RES, 1, 1/4W, 20.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R424 | 1.00 | 4706-2942-001 | RES, 1, 1/4W, 29.4K OHM | 00/00/00 | 99/99/99 |
| ACT | R425 | -.-- | 4706-1782-001 | RES, 1, 1/4W, 17.8K OHM | 00/00/00 | 99/99/99 |
| ACT | R426 | -.-- | 4702-0102-003 | RES, S, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R427 | -.-- | 4702-0102-003 | RES, S, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R428 | 1.00 | 4702-0474-003 | RES, S, 1/4W, 470K OHM | 00/00/00 | 99/99/99 |
| ACT | R430 | 4.00 | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R431 | 1.00 | 4702-0104-003 | RES, S, 1/4W, 100K OHM | 00/00/00 | 99/99/99 |
| ACT | R439 | -.-- | 4702-0102-003 | RES, S, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R440 | -.-- | 4702-0102-003 | RES, S, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R441 | -.-- | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R442 | -.-- | 4753-0502-002 | POT, 5K OHM, 62-2-1-502 | 00/00/00 | 99/99/99 |
| ACT | R445 | -.-- | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |



STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-7530-200 | REVISION A | DESCRIPTION PCB ASSY,DME REPLY | LAST ECN # 469 | DATE INC 06/15/87

| STAT | REF.DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R446 | -.-- | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R447 | 1.00 | 4702-0473-003 | RES, S, 1/4W, 47K OHM | 00/00/00 | 99/99/99 |
| ACT | R448 | 1.00 | 4706-1433-001 | RES, 1, 1/4W, 143K OHM | 87/04/23 | 99/99/99 |
| ACT | R449 | 1.00 | 4702-0272-003 | RES, S, 1/4W, 2.7K OHM | 87/04/23 | 99/99/99 |
| ACT | R450 | 1.00 | 4706-3162-001 | RES, 1, 1/4W, 31.6K OHM | 87/04/23 | 99/99/99 |
| ACT | R451 | 1.00 | 4753-0103-002 | POT, 10K OHM, 62-2-1-103 | 87/04/23 | 99/99/99 |
| ACT | R452 | 2.00 | 4702-0222-003 | RES, S, 1/4W, 2.2K OHM | 87/04/23 | 99/99/99 |
| ACT | R453 | -.-- | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R454 | -.-- | 4702-0222-003 | RES, S, 1/4W, 2.2K OHM | 87/04/23 | 99/99/99 |
| ACT | R455 | -.-- | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R456 | -.-- | 4702-0102-003 | RES, S, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | TP401 | 7.00 | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP402 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP403 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP404 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP405 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP406 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP407 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | X402 | 5.00 | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X403 | 3.00 | 3211-3164-000 | IC,74LS164,8-BIT REGISTER | 00/00/00 | 99/99/99 |
| ACT | X404 | 1.00 | 3211-3086-000 | IC,74LS86,QUAD 2-INPUT EXCL-OR | 00/00/00 | 99/99/99 |
| ACT | X405 | -.-- | 3211-3164-000 | IC,74LS164,8-BIT REGISTER | 00/00/00 | 99/99/99 |
| ACT | X407 | 3.00 | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X409 | 2.00 | 3131-0000-024 | IC,74LS123,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X411 | -.-- | 3211-3164-000 | IC,74LS164,8-BIT REGISTER | 00/00/00 | 99/99/99 |
| ACT | X412 | 4.00 | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG. PAGE 5

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-7530-200 | A | PCB ASSY,DME REPLY | B 469 | 06/15/87 |

| STAT | REF.DES. | QTY | COMP PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | X413 | 3.00 | 3131-0000-029 | IC,74LS190,BCD SYN U/D COUNTER | 00/00/00 | 99/99/99 |
| ACT | X414 | -.-- | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X415 | 5.00 | 3131-0000-038 | IC,74LS74A,DUAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X416 | 1.00 | 3131-0000-006 | IC,74LS76A,DUAL JK FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X417 | 1.00 | 3131-0000-030 | IC,74LS191,BIN SYN U/D COUNTER | 00/00/00 | 99/99/99 |
| ACT | X419 | 1.00 | 3131-0000-032 | IC,74LS02,QUAD 2-INPUT NOR | 00/00/00 | 99/99/99 |
| ACT | X420 | -.-- | 3131-0000-029 | IC,74LS190,BCD SYN U/D COUNTER | 00/00/00 | 99/99/99 |
| ACT | X421 | -.-- | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X422 | -.-- | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X423 | -.-- | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X424 | -.-- | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X425 | -.-- | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X426 | -.-- | 3131-0000-038 | IC,74LS74A,DUAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X427 | 1.00 | 3131-0000-033 | IC,74LS04,HEX INVERTER | 00/00/00 | 99/99/99 |
| ACT | X428 | -.-- | 3131-0000-029 | IC,74LS190,BCD SYN U/D COUNTER | 00/00/00 | 99/99/99 |
| ACT | X429 | 1.00 | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X430 | -.-- | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X431 | 3.00 | 3131-0000-002 | IC,74LS10,TRIPLE 3-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X432 | -.-- | 3131-0000-002 | IC,74LS10,TRIPLE 3-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X433 | -.-- | 3131-0000-038 | IC,74LS74A,DUAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X434 | -.-- | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X435 | 1.00 | 3131-0000-045 | IC,74LS138,3-TO-8 DCDR/MPLXR | 00/00/00 | 99/99/99 |
| ACT | X436 | 1.00 | 3131-0000-037 | IC,74LS20,DUAL 4-INPUT NAND | 87/04/23 | 99/99/99 |
| ACT | X437 | -.-- | 3131-0000-002 | IC,74LS10,TRIPLE 3-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X438 | -.-- | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X439 | -.-- | 3131-0000-038 | IC,74LS74A,DUAL D FLIP-FLOP | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG. PAGE 6

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-7530-200 | A | PCB ASSY,DME REPLY | B 469 | 06/15/87 |

| STAT | REF.DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | X440 | -.-- | 3131-0000-038 | IC,74LS74A,DUAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X441 | -.-- | 3131-0000-024 | IC,74LS123,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC. |
|---|---|---|---|---|
| 7010-7530-200 | A | PCB ASSY,DME REPLY | 8 469 | 06/15/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 1501-0103-005 | A | CAP,UF .010, 50V,DISC, 10 | 1 00 | EA | P3 | C416 |
| 1502-0223-006 | | CAP,UF .022, 100V,MPC, 5 | 1.00 | EA | P3 | C411 |
| 1506-0101-017 | | CAP,PF 100, 100V,NPO, 5 | 1.00 | EA | P3 | C410 |
| 1506-0102-017 | | CAP,PF 1000, 100V,NPO, 5 | 2.00 | EA | P3 | C406<br>C436 |
| 1506-0221-017 | | CAP,PF 220, 100V,NPO, 5 | 5.00 | EA | P3 | C403<br>C405<br>C414<br>C434<br>C462 |
| 1506-0271-017 | | CAP,PF 270, 100V,NPO, 5 | 1.00 | EA | P3 | C409 |
| 1506-0272-017 | | CAP,PF 2700, 100V,NPO, 5 | 2.00 | EA | P3 | C407<br>C408 |
| 1506-0352-017 | | CAP,PF 3900, 100V,NPO, 5 | 1.00 | EA | P3 | C402 |
| 1506-0562-017 | | CAP,PF 5600, 100V,NPO, 5 | 4.00 | EA | P3 | C401<br>C413<br>C435<br>C461 |
| 1506-0680-017 | | CAP,PF 68, 100V,NPO, 5 | 1.00 | EA | P3 | C412 |
| 1506-0681-017 | | CAP,PF 680, 100V,NPO, 5 | 1.00 | EA | P3 | C404 |
| 1507-0105-023 | | CAP,UF 1.0, 10V,TANT, 20 | 1.00 | EA | P3 | C415 |
| 1521-0000-008 | | CAP,UF .10, 50V,DIP,Z5U | 15.00 | EA | P3 | C418<br>C419<br>C420<br>C421<br>C422<br>C423 |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 2

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC. |
|---|---|---|---|---|
| 7010-7530-200 | A | PCB ASSY,DME REPLY | 8.469 | 06/15/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | C424<br>C425<br>C426<br>C427<br>C428<br>C429<br>C430<br>C431<br>C432 |
| 1580-2202-016 | -- | CAP,UF, 22, 16V ,ELE 20 | 1.00 | EA | P3 | C433 |
| 1700-7520-200 | B | PC BD,DME REPLY | 1.00 | EA | P6 | #01 |
| 2106-0000-007 | | TERM,GND,USECO 90518-5 OR -7 | 7.00 | EA | F4 | TP401<br>TP402<br>TP403<br>TP404<br>TP405<br>TP406<br>TP407 |
| 2108-0000-008 | | PIN FOR 5-203 EJECTOR M/C | 2.00 | EA | P4 | #03 |
| 3101-0000-007 | | SOCKET ICN-202-S3G | 3.00 | EA | P2 | #04 |
| 3131-0000-002 | | IC,74LS10,TRIPLE 3-INPUT NAND | 1.00 | EA | P2 | X431<br>X432<br>X437 |
| 3131-0000-006 | | IC,74LS76A,DUAL JK FLIP-FLOP | 1.00 | EA | P2 | X416 |
| 3131-0000-017 | | IC,74LS221,DUAL MULTIVIBRATOR | 5.00 | EA | P2 | X402<br>X422<br>X423<br>X424<br>X425 |
| 3131-0000-024 | | IC,74LS123,DUAL MULTIVIBRATOR | 2.00 | EA | P2 | X409<br>X441 |
| 3131-0000-029 | | IC,74LS190,BCD SYN U/D COUNTER | 3.00 | EA | P2 | X413 |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 3

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC. |
|---|---|---|---|---|
| 7010-7530-200 | A | PCB ASSY,DME REPLY | 0 469 | 06/15/87 |

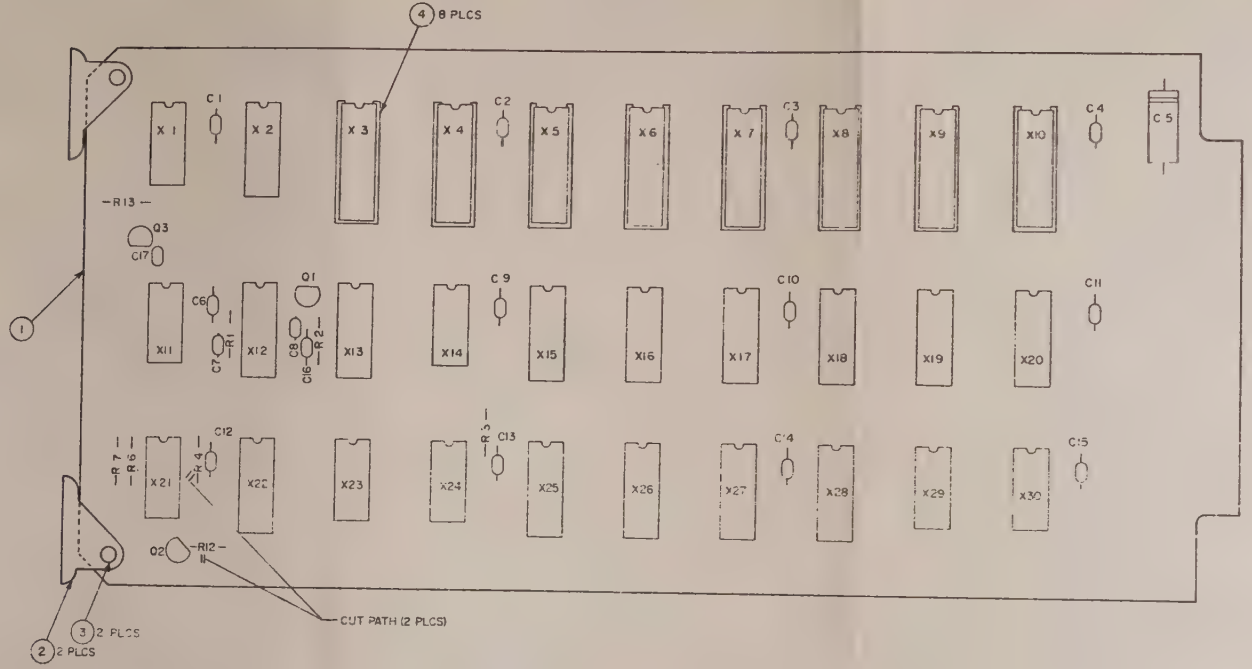
| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | X420 X428 |
| 3131-0000-030 | | IC,74LS191,BIN SYN U/D COUNTER | 1.00 | EA | P2 | X417 |
| 3131-0000-032 | | IC,74LS32,QUAD 2-INPUT NOR | 1.00 | EA | P2 | X419 |
| 3131-0000-033 | | IC,74LS04,HEX INVERTER | 1.00 | EA | P2 | X427 |
| 3131-0000-037 | | IC,74LS20,DUAL 4-INPUT NAND | 1.00 | EA | P2 | X436 |
| 3131-0000-038 | | IC,74LS74A,DUAL D FLIP-FLOP | 5.00 | EA | P2 | X415 X426 X433 X439 X440 |
| 3131-0000-043 | | IC,74LS377,OCTAL D FLIP-FLOP | 3.00 | EA | P2 | X407 X414 X421 |
| 3131-0000-044 | | IC,74LS00,QUAD 2-INPUT NAND | 4.00 | EA | P2 | X412 X430 X434 X438 |
| 3131-0000-045 | | IC,74LS138,3-TO-8 DCDR/MPLXR | 1.00 | EA | P2 | X435 |
| 3211-3086-000 | | IC,74LS86,QUAD 2-INPUT EXCL-OR | 1.00 | EA | P2 | X404 |
| 3211-3164-000 | | IC,74LS164,8-BIT REGISTER | 3.00 | EA | P2 | X403 X405 X411 |
| 3211-3244-000 | | IC,74LS244,OCTAL BUF/DRVR/RCVR | 1.00 | EA | P2 | X429 |
| 4104-0000-002 | | CARD GUIDE & EJECTOR S-203 | 2.00 | EA | P3 | *02 |
| 4702-0102-003 | | RES, 5, 1/4W, 1.0K OHM | 9.00 | EA | P4 | R410 |

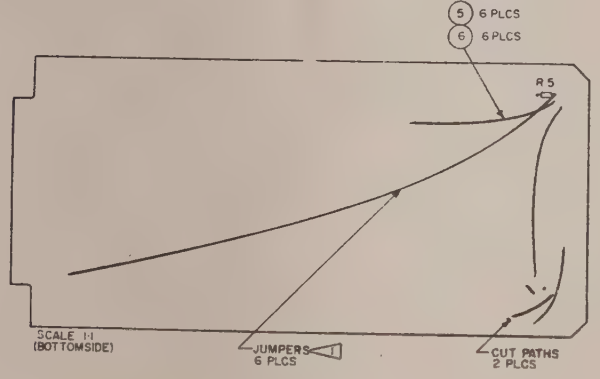
PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 4

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC. |
|---|---|---|---|---|
| 7010-7530-200 | A | PCB ASSY,DME REPLY | 0 469 | 06/15/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | R411 R414 R415 R426 R427 R439 R440 R456 |
| 4702-0103-003 | | RES, 5, 1/4W, 10K OHM | 9.00 | EA | P4 | R401 R402 R403 R405 R406 R407 R408 R441 R453 |
| 4702-0104-003 | | RES, 5, 1/4W, 100K OHM | 1.00 | EA | P4 | R431 |
| 4702-0182-003 | | RES, 5, 1/4W, 1.8K OHM | 1.00 | EA | P4 | R416 |
| 4702-0222-003 | | RES, 5, 1/4W, 2.2K OHM | 2.00 | EA | P4 | R452 R454 |
| 4702-0272-003 | | RES, 5, 1/4W, 2.7K OHM | 1.00 | EA | P4 | R449 |
| 4702-0472-003 | | RES, 5, 1/4W, 4.7K OHM | 4.00 | EA | P4 | R430 R445 R446 R455 |
| 4702-0473-003 | | RES, 5, 1/4W, 47K OHM | 1.00 | EA | P4 | R447 |
| 4702-0474-003 | | RES, 5, 1/4W, 470K OHM | 1.00 | EA | P4 | R428 |
| 4706-1432-001 | | RES, 1, 1/4W, 14.3K OHM | 1.00 | EA | P4 | R409 |
| 4706-1433-001 | | RES, 1, 1/4W, 143K OHM | 1.00 | EA | P4 | R448 |
| 4706-1652-001 | | RES, 1, 1/4W, 16.5K OHM | 1.00 | EA | P4 | |

| | | | |
|---|---|---|---|
| | A | DESIGN REL | DAH |




NOTES

1 USE TAK-PAC (1250-000-1001 AS REQUIRED.
2 REF SCHEMATIC 6000-7510-300

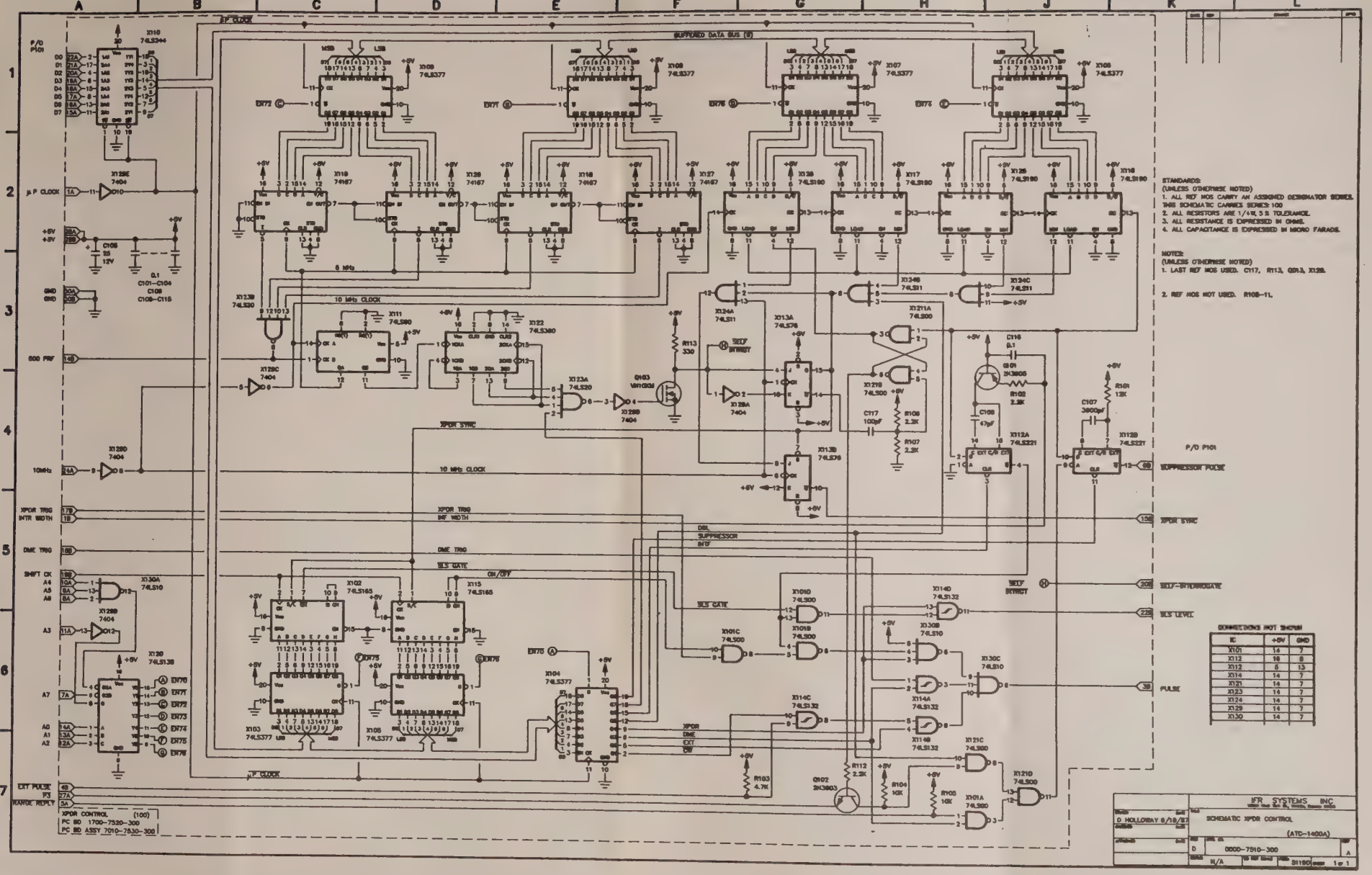
JUN 18 1987

| | |
|---|---|
| DRAWN | J HOLLOWAY 3/31/87 |
| CHECKED | K MAHER 4/21/87 |
| APPROVED | 6/15/87 |

IPR SYSTEMS INC

PCB TRANSPONDER CONTROL

6000-7530-300 A


STANDARDS:
(UNLESS OTHERWISE NOTED)
1. ALL REF NOS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES: 100
2. ALL RESISTORS ARE 1/4W, 5% TOLERANCE.
3. ALL RESISTANCE IS EXPRESSED IN OHMS.
4. ALL CAPACITANCE IS EXPRESSED IN MICRO FARADS.
NOTES:
(UNLESS OTHERWISE NOTED)
1. LAST REF NOS USED. C117, R113, Q93, X128.
2. REF NOS NOT USED. R108-11.
CONNECTIONS NOT SHOWN
IC +5V GND
X101 14 7
X112 16 8
X112 5 13
X114 14 7
X121 14 7
X123 14 7
X124 14 7
X129 14 7
X130 14 7
XPDR CONTROL (100)
PC BD 1700-7520-300
PC BD ASSY 7010-7530-300
SUPPRESSED DATA BUS (8)
10 MHz CLOCK
XPDR SYNC
XPDR TRIG
INTR WIDTH
DME TRIG
SLS GATE
ON/OFF
SELF INTEST
SUPPRESSOR PULSE
XPDR SYNC
SELF-SYNCHRONIZE
SLS LEVEL
PULSE
P/O P101
SUPPRESSOR PULSE
XPDR SYNC
SELF-SYNCHRONIZE
SLS LEVEL
PULSE
EXT PULSE
IF3
RANGE REPLY
D HOLLOWAY 6/18/87
SCHEMATIC XPDR CONTROL
(ATC-1400A)
0000-7510-300
NFR SYSTEMS INC

JUN 18 1987

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-7530-300 | A | PCB ASSY,TRANSPONDER CONTROL | A 457 | 05/14/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 1050-0000-075 | | WIRE,BUS,TINNED COPPER,26GA | .00 | SP | FS | *05 |
| 1506-0101-017 | | CAP,PF, 100, 100V,NPO, 5 | 1.00 | EA | P3 | C117 |
| 1506-0392-017 | | CAP,PF 3900, 100V,NPO, 5 | 1.00 | EA | P3 | C107 |
| 1506-0470-017 | | CAP,PF 47, 100V,NPO 5 | 1.00 | EA | P3 | C108 |
| 1521-0000-008 | | CAP,UF 10, 50V,CIP,Z5U | 13.00 | EA | P3 | C101<br>C102<br>C103<br>C104<br>C106<br>C109<br>C110<br>C111<br>C112<br>C113<br>C114<br>C115<br>C116 |
| 1560-2202-016 | -- | CAP,UF, 22, 16V ,ELE 20 | 1.00 | EA | P3 | C105 |
| 1700-7520-300 | A | PC BD,TRANSPONDER CONTROL | 1.00 | EA | P6 | *01 |
| 2108-0000-008 | | PIN FOR S-203 EJECTOR W/C | 2.00 | EA | P4 | *03 |
| 3101-0000-087 | | SOCKET ICN-203-SIG | 8.00 | EA | P2 | *04 |
| 3130-0000-031 | | IC,74167,SYN DEC RATE MULTR | 4.00 | EA | P2 | X118<br>X119<br>X127<br>X128 |
| 3131-0000-002 | | IC,74LS10,TRIPLE 3-INPUT NAND | 1.00 | EA | P2 | X130 |
| 3131-0000-006 | | IC,74LS76A,DUAL JK FLIP-FLOP | 1.00 | EA | P2 | X113 |
| 3131-0000-017 | | IC,74LS221,DUAL MULTIVIBRATOR | 1.00 | EA | P2 | |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 2

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-7530-300 | A | PCB ASSY,TRANSPONDER CONTROL | A 457 | 05/14/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | X112 |
| 3131-0000-026 | | IC,74LS11,TRIPLE 3-INPUT AND | 1.00 | EA | P2 | X124 |
| 3131-0000-028 | | IC,74LS90,DECADE COUNTER | 1.00 | EA | P2 | X111 |
| 3131-0000-029 | | IC,74LS190,BCD SYN U/D COUNTER | 4.00 | EA | P2 | X116<br>X117<br>X125<br>X126 |
| 3131-0000-033 | | IC,74LS04,HEX INVERTER | 1.00 | EA | P2 | X129 |
| 3131-0000-037 | | IC,74LS20,DUAL 4-INPUT NAND | 1.00 | EA | P2 | X123 |
| 3131-0000-043 | | IC,74LS377,OCTAL D FLIP-FLOP | 7.00 | EA | P2 | X103<br>X104<br>X105<br>X106<br>X107<br>X108<br>X109 |
| 3131-0000-044 | | IC,74LS00,QUAD 2-INPUT NAND | 2.00 | EA | P2 | X101<br>X121 |
| 3131-0000-045 | | IC,74LS138,3-TO-8 DCDR/MPLXR | 1.00 | EA | P2 | X120 |
| 3131-0000-049 | -- | IC,74LS132,4X 2-INP NAND,SCHTR | 1.00 | EA | P2 | X114 |
| 3211-3165-000 | | IC,74LS165,8-BIT REGISTER | 2.00 | EA | P2 | X102<br>X115 |
| 3211-3244-000 | | IC,74LS244,OCTAL BUF/DRVR/RCVR | 1.00 | EA | P2 | X110 |
| 3211-3390-000 | | IC,74LS390,DUAL DECADE COUNTER | 1.00 | EA | P2 | X122 |
| 4104-0000-002 | | CARD GUIDE & EJECTOR S-203 | 2.00 | EA | P3 | *02 |

JUN 1 9

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 3

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-7530-300 | A | PCB ASSY,TRANSPONDER CONTROL | B 457 | 05/14/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 4701-0103-003 | | RES, S, 1/8W, 10K OHM | 1.00 | EA | P4 | R105 |
| 4701-0222-003 | | RES, S, 1/8W, 2.2K OHM | 1.00 | EA | P4 | R112 |
| 4702-0103-003 | | RES, S, 1/4W, 10K OHM | 1.00 | EA | P4 | R104 |
| 4702-0123-003 | | RES, S, 1/4W, 12K OHM | 1.00 | EA | P4 | R101 |
| 4702-0222-003 | | RES, S, 1/4W, 2.2K OHM | 2.00 | EA | P4 | R106 R107 |
| 4702-0331-003 | | RES, S, 1/4W, 330 OHM | 1.00 | EA | P4 | R113 |
| 4702-0472-003 | | RES, S, 1/4W, 4.7K OHM | 2.00 | EA | P4 | R102 R103 |
| 4807-0000-001 | | TRANS, 2N3903 ,NPN HS SW | 1.00 | EA | P2 | Q102 |
| 4807-0000-002 | | TRANS, 2N3905 ,PNP HS SW | 1.00 | EA | P2 | Q101 |
| 5050-2401-000 | | TRANS,VN10KM ,N-CH VMOSFET | 1.00 | EA | P2 | Q103 |
| 6011-0018-001 | | TUBING,TF,26 AWG,NATURAL,TJ | 2.00 | FT | FS | *06 |

JUN 18 1987

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 1

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO. 7010-7530-300 REVISION A DESCRIPTION PCB ASSY,TRANSPONDER CONTROL LAST ECN B 457 DATE INC 05/14/87

| STAT | REF.DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | *01 | 1.00 | 1700-7520-300 | PC BD,TRANSPONDER CONTROL | 87/04/09 | 99/99/99 |
| ACT | *02 | 2.00 | 4104-0000-002 | CARD GUIDE & EJECTOR S-203 | 00/00/00 | 99/99/99 |
| ACT | *03 | 2.00 | 2108-0000-008 | PIN FOR S-203 EJECTOR W/C | 00/00/00 | 99/99/99 |
| ACT | *04 | 8.00 | 3101-0000-007 | SOCKET ICN-203-S3G | 00/00/00 | 99/99/99 |
| ACT | *05 | .00 | 1050-0000-075 | WIRE,BUS,TINNED COPPER,26GA | 87/05/14 | 99/99/99 |
| ACT | *06 | 2.00 | 6011-0018-001 | TUBING,TF,26 AWG,NATURAL,TU | 87/05/14 | 99/99/99 |
| ACT | C101 | 13.00 | 1521-0000-008 | CAP,UF .0, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C102 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C103 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C104 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C105 | 1.00 | 1580-2202-016 | CAP,UF, 22, 16V ,ELE 20 | 87/03/05 | 99/99/99 |
| ACT | C106 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C107 | 1.00 | 1506-0392-017 | CAP,PF 3900, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C108 | 1.00 | 1506-0470-017 | CAP,PF 47, 100V,NPO 5 | 00/00/00 | 99/99/99 |
| ACT | C109 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C110 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C111 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C112 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C113 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C114 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C115 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C116 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C117 | 1.00 | 1506-0101-017 | CAP,PF 100, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | Q101 | 1.00 | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q102 | 1.00 | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 87/04/09 | 99/99/99 |
| ACT | Q103 | 1.00 | 5050-2401-000 | TRANS,VN10KM ,N-CH VMOSFET | 87/04/09 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 2

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO. 7010-7530-300 REVISION A DESCRIPTION PCB ASSY,TRANSPONDER CONTROL LAST ECN B 457 DATE INC 05/14/87

| STAT | REF.DES. | QTY | COMP PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R101 | 1.00 | 4702-0123-003 | RES, S, 1/4W, 12K OHM | 00/00/00 | 99/99/99 |
| ACT | R102 | 2.00 | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R103 | -.-- | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R104 | 1.00 | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R105 | 1.00 | 4701-0103-003 | RES, S, 1/8W, 10K OHM | 87/05/14 | 99/99/99 |
| ACT | R106 | 2.00 | 4702-0222-003 | RES, S, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R107 | -.-- | 4702-0222-003 | RES, S, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R112 | 1.00 | 4701-0222-003 | RES, S, 1/8W, 2.2K OHM | 87/04/09 | 99/99/99 |
| ACT | R113 | 1.00 | 4702-0331-003 | RES, S, 1/4W, 330 OHM | 87/04/09 | 99/99/99 |
| ACT | X101 | 2.00 | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X102 | 2.00 | 3211-3165-000 | IC,74LS165,8-BIT REGISTER | 00/00/00 | 99/99/99 |
| ACT | X103 | 7.00 | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X104 | -.-- | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X105 | -.-- | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X106 | -.-- | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X107 | -.-- | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X108 | -.-- | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X109 | -.-- | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X110 | 1.00 | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X111 | 1.00 | 3131-0000-028 | IC,74LS90,DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X112 | 1.00 | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X113 | 1.00 | 3131-0000-006 | IC,74LS76A,DUAL JK FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X114 | 1.00 | 3131-0000-049 | IC,74LS132,4X 2-INP NAND,SCHTR | 87/04/09 | 99/99/99 |
| ACT | X115 | -.-- | 3211-3165-000 | IC,74LS165,8-BIT REGISTER | 00/00/00 | 99/99/99 |
| ACT | X116 | 4.00 | 3131-0000-029 | IC,74LS190,BCD SYN U/D COUNTER | 00/00/00 | 99/99/99 |
| ACT | X117 | -.-- | 3131-0000-029 | IC,74LS190,BCD SYN U/D COUNTER | 00/00/00 | 99/99/99 |

JUN 16 1987

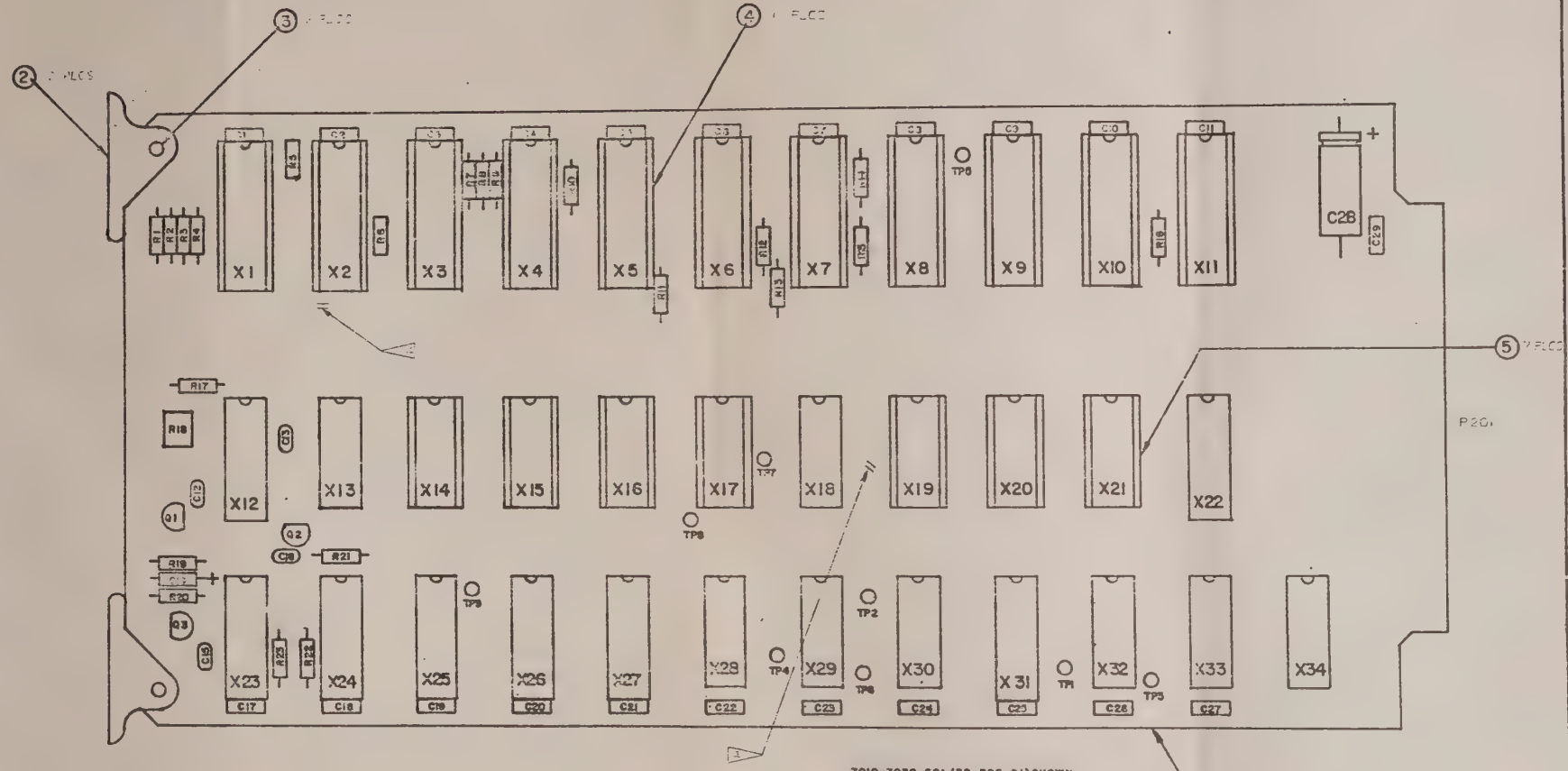
STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7019-1530-300 | A | PCB ASSY,TRANSPONDER CONTROL | B 457 | 05/14/87 |

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | X118 | 4.00 | 3130-0000-031 | IC,74167,SYN DEC RATE MULTR | 00/00/00 | 99/99/99 |
| ACT | X119 | -.-- | 3130-0000-031 | IC,74167,SYN DEC RATE MULTR | 00/00/00 | 99/99/99 |
| ACT | X120 | 1.00 | 3131-0000-045 | IC,74LS138,3-TO-8 DCDR/MPLXR | 00/00/00 | 99/99/99 |
| ACT | X121 | -.-- | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X122 | 1.00 | 3211-3390-000 | IC,74LS390,DUAL DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X123 | 1.00 | 3131-0000-037 | IC,74LS20,DUAL 4-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X124 | 1.00 | 3131-0000-026 | IC,74LS11,TRIPLE 3-INPUT AND | 00/00/00 | 99/99/99 |
| ACT | X125 | -.-- | 3131-0000-029 | IC,74LS190,BCD SYN U/D COUNTER | 00/00/00 | 99/99/99 |
| ACT | X126 | -.-- | 3131-0000-029 | IC,74LS190,BCD SYN U/D COUNTER | 00/00/00 | 99/99/99 |
| ACT | X127 | -.-- | 3130-0000-031 | IC,74167,SYN DEC RATE MULTR | 00/00/00 | 99/99/99 |
| ACT | X128 | -.-- | 3130-0000-031 | IC,74167,SYN DEC RATE MULTR | 00/00/00 | 99/99/99 |
| ACT | X129 | 1.00 | 3131-0000-033 | IC,74LS04,HEX INVERTER | 00/00/00 | 99/99/99 |
| ACT | X130 | 1.00 | 3131-0000-002 | IC,74LS10,TRIPLE 3-INPUT NAND | 00/00/00 | 99/99/99 |

JUN 18 1987

| DATE | REV | CHANGE | APP'D |
|---|---|---|---|
| 4-7-97 | A | DESIGN RELEASE = 1226 WAW | |




7010-3030-501 (30-305-01) SHOWN

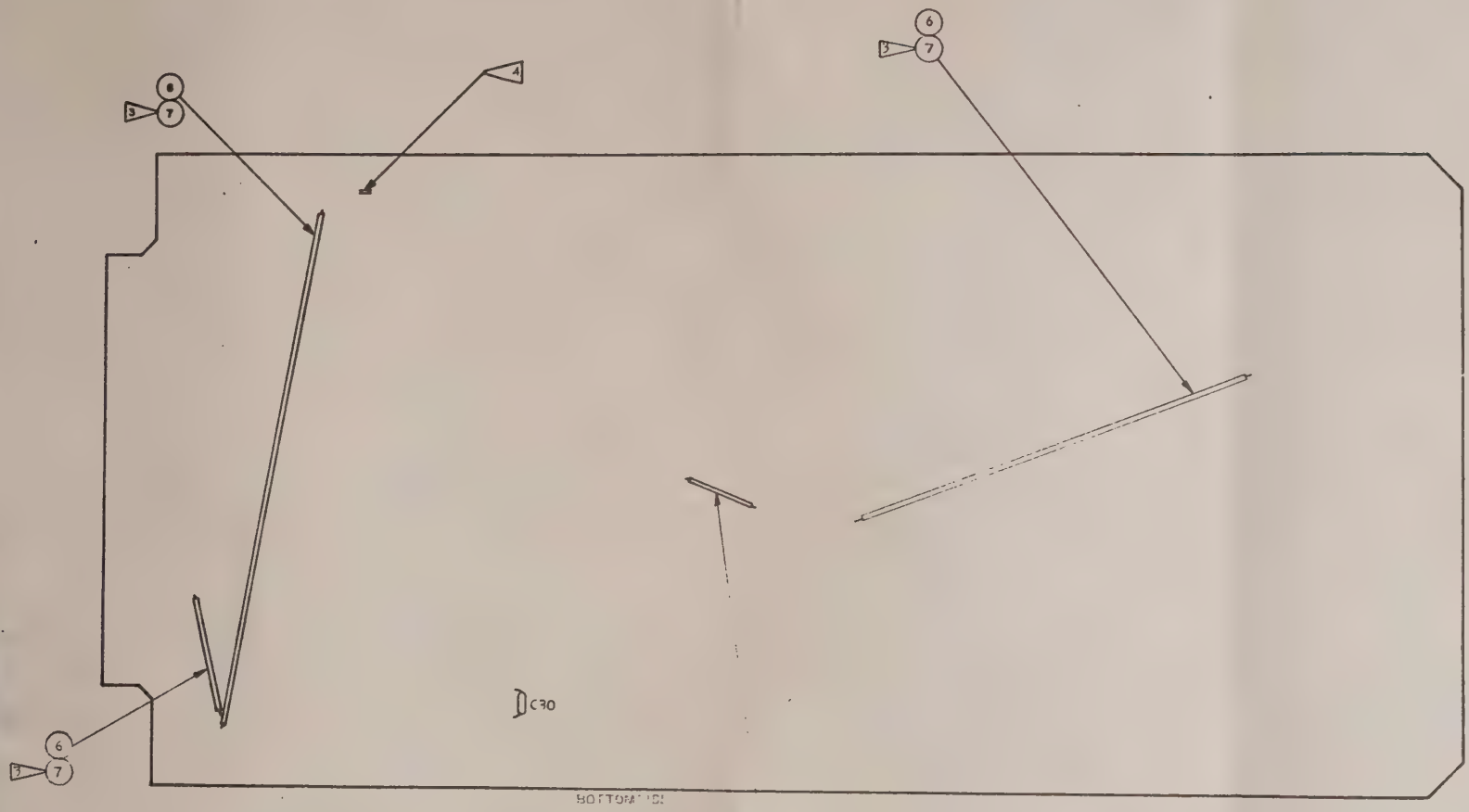
NOTES:
1. REFERENCE SCHEMATIC IS 0000-3010-501
2. REF. DES. SERIES IS 200
3. APPLY TAK-PAK (DPN 1051-0100-100) AS REQUIRED
4. CUT PATHWORK AS SHOWN

SEE SEPARATE BILL OF MATERIAL

MAR 13 1997

| | | | |
|---|---|---|---|
| TOLERANCES | DRAWN | DATE | -IFR INC- WICHITA KANSAS |
| | CHECKED | DATE | TITLE |
| | APPROVED | DATE | P.C. BD. ASSY, XPDR PULSE ATC-1400A (30-305-01) |
| MATERIAL | | | SIZE C; PART NUMBER 7010-3030-501; REV A |
| FINISH | | | SCALE 2/1; TOP VIEW; SHEET 1 OF 2 |

SEE SHEET 1

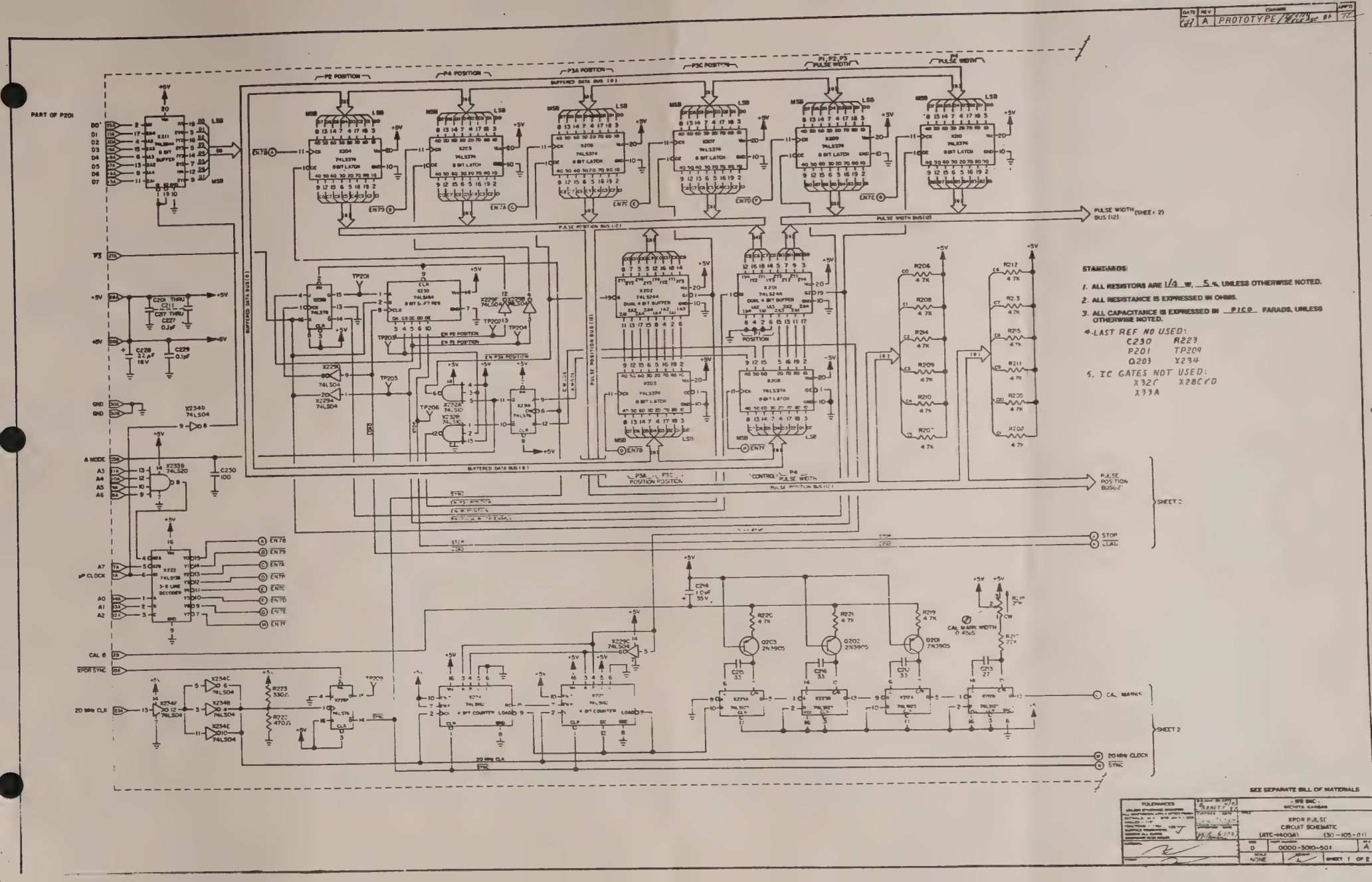



7010-3030-501 (30-305-01) SHOWN

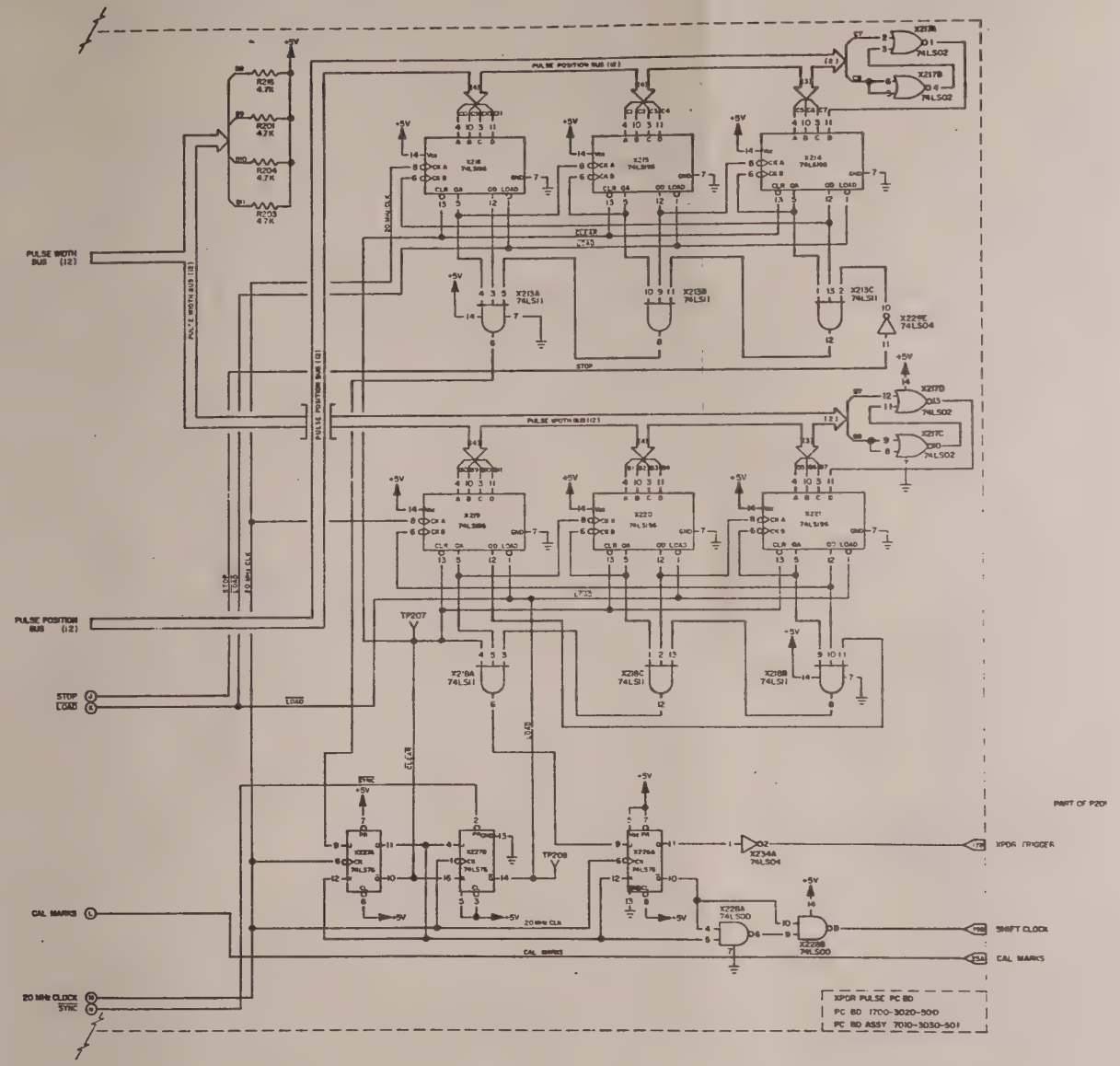
6
3
7

SEE SEPARATE BILL OF MATERIALS

| | |
|---|---|
| TOLERANCES | -ITT INC- WICHITA, KANSAS |
| | P.C. BD. ASSY., XPDR PULSE |
| | ATC-1400 A 30-305-01 |
| | C 7010-3030-501 A |
| | SCALE 2:1 SHEET 2 OF 2 |


PART OF P201
P2 POSITION
P4 POSITION
P3A POSITION
P3C POSITION
P1, P2, P3 PULSE WIDTH
P4 PULSE WIDTH
BUFFERED DATA BUS (8)
PULSE WIDTH BUS (12)
PULSE POSITION BUS (12)
(SHEET 2)
STANDARDS:
1. ALL RESISTORS ARE 1/4 W, 5 % UNLESS OTHERWISE NOTED.
2. ALL RESISTANCE IS EXPRESSED IN OHMS.
3. ALL CAPACITANCE IS EXPRESSED IN PICO FARADS, UNLESS OTHERWISE NOTED.
4. LAST REF NO USED:
C230 R223
P201 TP209
Q203 X234
5. IC GATES NOT USED:
X32C X28C,D
X33A
SEE SEPARATE BILL OF MATERIALS
XPDR PULSE
CIRCUIT SCHEMATIC
(ATC-1400A)
(30-105-01)
0000-3010-501
SHEET 1 OF 2

| GATE | REV | CHG'S |
|---|---|---|
| 69 | A | SEE SHEET 1 |




SEE SEPARATE BILL OF MATERIALS

| | | |
|---|---|---|
| TOLERANCES | DRAWN | - BW INC. - |
| | TRACED | XPDR PULSE CIRCUIT SCHEMATIC |
| | CHECKED | (ATC-1400A) (30-103-01) |
| | APPROVED | |
| | | SIZE D — PART NUMBER 0000-3010-501 — REV A |
| | | SCALE NONE — SHEET 2 OF 2 |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

ASSY NO 7010-3030-S01 | REVISION A | DESCRIPTION PCB ASSY,TRANSPONDER PULSE | LAST ECN | DATE INC 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 0003-0000-000 | | ***** FOR REFERENCE ONLY ***** | 1.00 | EA | F | P201 |
| 1050-0000-075 | | WIRE,BUS,TINNED COPPER,26GA | .08 | IN | FS | *06 |
| 1501-0270-001 | | CAP,PF 27, 1000V,DISC, 10 | 1.00 | EA | P3 | C213 |
| 1501-0330-001 | | CAP,PF 33, 1000V,DISC, 10 | 3.00 | EA | P3 | C212 C215 C216 |
| 1506-0101-017 | | CAP,PF, 100, 100V,NPO, 5 | 1.00 | EA | P3 | C230 |
| 1507-0105-118 | | CAP,UF 1.0, 35V,TANT, 5 | 1.00 | EA | P3 | C214 |
| 1521-0000-008 | | CAP,UF 10, 50V,DIP,Z5U | 23.00 | EA | P3 | C201 C202 C203 C204 C205 C206 C207 C208 C209 C210 C211 C217 C218 C219 C220 C221 C222 C223 C224 C225 C226 C227 C229 |
| 1580-2202-016 | -- | CAP,UF, 22, 16V ,ELE 20 | 1.00 | EA | P3 | C228 |
| 1700-3020-500 | A | PC BD,TRANSPONDER PULSE | 1.00 | EA | P6 | *01 |
| 2106-0000-007 | | TERM,GND,USECO 9051B-5 OR -7 | 9.00 | EA | F4 | |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 2

ASSY NO 7010-3030-S01 | REVISION A | DESCRIPTION PCB ASSY,TRANSPONDER PULSE | LAST ECN | DATE INC 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | TP201 TP202 TP203 TP204 TP205 TP206 TP207 TP208 TP209 |
| 2108-0000-008 | | PIN FOR 5-203 EJECTOR N/C | 2.00 | EA | F4 | *03 |
| 3101-0000-005 | | SOCKET ICN-143-S3G | 7.00 | EA | P2 | *05 |
| 3101-0000-007 | | SOCKET ICN-203-S3G | 11.00 | EA | P2 | *04 |
| 3131-0000-002 | | IC,74LS10,TRIPLE 3-INPUT NAND | 1.00 | EA | P2 | X232 |
| 3131-0000-006 | | IC,74LS76A,DUAL JK FLIP-FLOP | 3.00 | EA | P2 | X226 X227 X231 |
| 3131-0000-012 | | IC,74LS162A,4-BIT DEC COUNTER | 2.00 | EA | P2 | X224 X225 |
| 3131-0000-016 | | IC,74LS196,DEC COUNTER/LATCH | 6.00 | EA | P2 | X214 X215 X216 X219 X220 X221 |
| 3131-0000-024 | | IC,74LS123,DUAL MULTIVIBRATOR | 2.00 | EA | P2 | X212 X223 |
| 3131-0000-026 | | IC,74LS11,TRIPLE 3-INPUT AND | 2.00 | EA | P2 | X213 X218 |
| 3131-0000-032 | | IC,74LS02,QUAD 2-INPUT NOR | 1.00 | EA | P2 | X217 |
| 3131-0000-033 | | IC,74LS04,HEX INVERTER | 2.00 | EA | P2 | X229 |

JUN 18 1987

ASSY NO. 7010-3030-501 | REVISION A | DESCRIPTION PCB ASSY,TRANSPONDER PULSE | LAST ECN | DATE INC. 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | X234 |
| 3131-0000-037 | | IC,74LS20,DUAL 4-INPUT NAND | 1.00 | EA | P2 | /\/\/\/\/\ X233 |
| 3131-0000-044 | | IC,74LS00,QUAD 2-INPUT NAND | 1.00 | EA | P2 | /\/\/\/\ X228 |
| 3131-0000-045 | | IC,74LS138,3-TO-8 DCDR/MPLXR | 1.00 | EA | P2 | /\/\/\/\/\ X222 |
| 3211-3164-000 | | IC,74LS164,8-BIT REGISTER | 1.00 | EA | P2 | /\/\/\/\/\ X230 |
| 3211-3244-000 | | IC,74LS244,OCTAL BUF/DRVR/RCVR | 3.00 | EA | P2 | /\/\/\/\/\ X201 X202 X211 |
| 3211-3374-000 | | IC,74LS374,OCTAL D FLIP-FLOP | 8.00 | EA | P2 | /\/\/\/\/\ X203 X204 X205 X206 X207 X208 X209 X210 |
| 4104-0000-002 | | CARD GUIDE & EJECTOR S-203 | 2.00 | EA | P3 | /\/\/\/\/\ #02 |
| 4702-0223-003 | | RES, 5, 1/4W, 22K OHM | 1.00 | EA | P4 | /\/\/\/\/\ R217 |
| 4702-0331-003 | | RES, 5, 1/4W, 330 OHM | 1.00 | EA | P4 | /\/\/\/\/\ R223 |
| 4702-0471-003 | | RES, 5, 1/4W, 470 OHM | 1.00 | EA | P4 | /\/\/\/\/\ R222 |
| 4702-0472-003 | | RES, 5, 1/4W, 4.7K OHM | 19.00 | EA | P4 | /\/\/\/\/\ R201 R202 R203 R204 R205 R206 R207 R208 R209 R210 |



ASSY NO. 7010-3030-501 | REVISION A | DESCRIPTION PCB ASSY,TRANSPONDER PULSE | LAST ECN | DATE INC. 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | R211 R212 R213 R214 R215 R216 R219 R220 R221 |
| 4753-0203-002 | | POT, 20K OHM, 62-2-1-203 | 1.00 | EA | P4 | /\/\/\/\/\ R218 |
| 4807-0000-002 | | TRANS, 2N3905 ,PNP HS SW | 3.00 | EA | P2 | /\/\/\/\/\ Q201 Q202 Q203 |
| 6011-0018-001 | | TUBING,TF,26 AWG,NATURAL,TW | 1.00 | FT | F5 | /\/\/\/\/\ #07 |
| DWG-0000-3010-501 | A | SCHEM,TRANSPONDER PULSE 1400A | .00 | EA | X | /\/\/\/\ |

JUN 18 1987

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 1

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3030-501 | A | PCB ASSY,TRANSPONDER PULSE | | 05/04/87 |

| STAT | REF.DES. | QTY | COMP. PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | | 00 | DWG-0000-3010-501 | SCHEM,TRANSPONDER PULSE 1400A | 87/05/05 | 99/99/99 |
| ACT | *01 | 1.00 | 1700-3020-500 | PC BD,TRANSPONDER PULSE | 00/00/00 | 99/99/99 |
| ACT | *02 | 2.00 | 4104-0000-002 | CARD GUIDE & EJECTOR S-203 | 00/00/00 | 99/99/99 |
| ACT | *03 | 2.00 | 2109-0000-008 | PIN FOR S-203 EJECTOR N/C | 00/00/00 | 99/99/99 |
| ACT | *04 | 11.00 | 3101-0000-007 | SOCKET ICN-203-S3G | 00/00/00 | 99/99/99 |
| ACT | *05 | 7.00 | 3101-0000-005 | SOCKET ICN-143-S3G | 00/00/00 | 99/99/99 |
| ACT | *06 | 00 | 1050-0000-079 | WIRE,BUS,TINNED COPPER,26GA | 00/00/00 | 99/99/99 |
| ACT | *07 | 1.00 | 6011-0018-001 | TUBING,TF,26 AWG,NATURAL,TU | 00/00/00 | 99/99/99 |
| ACT | C201 | 23.00 | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C202 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C203 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C204 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C205 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C206 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C207 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C208 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C209 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C210 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C211 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C212 | 3.00 | 1501-0330-001 | CAP,PF 33, 1000V,DISC, 10 | 00/00/00 | 99/99/99 |
| ACT | C213 | 1.00 | 1501-0270-001 | CAP,PF 27, 1000V,DISC, 10 | 00/00/00 | 99/99/99 |
| ACT | C214 | 1.00 | 1507-0105-118 | CAP,UF 1.0, 35V,TANT, 5 | 00/00/00 | 99/99/99 |
| ACT | C215 | -.-- | 1501-0330-001 | CAP,PF 33, 1000V,DISC, 10 | 00/00/00 | 99/99/99 |
| ACT | C216 | -.-- | 1501-0330-001 | CAP,PF 33, 1000V,DISC, 10 | 00/00/00 | 99/99/99 |
| ACT | C217 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C218 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 2

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3030-501 | A | PCB ASSY,TRANSPONDER PULSE | | 05/04/87 |

| STAT | REF.DES | QTY | COMP. PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | C219 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C220 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C221 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C222 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C223 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C224 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C225 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C226 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C227 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C228 | 1.00 | 1580-2202-016 | CAP,UF, 22, 16V,ELE 20 | 87/03/05 | 99/99/99 |
| ACT | C229 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C230 | 1.00 | 1506-0101-017 | CAP,PF 100 100V NPO 5 | 00/00/00 | 99/99/99 |
| ACT | P201 | 1.00 | 0003-0000-000 | ***** FOR REFEPENCE ONLY ***** | 87/05/05 | 99/99/99 |
| ACT | Q201 | 3.00 | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q202 | -.-- | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q203 | -.-- | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | R201 | 19.00 | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R202 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R203 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R204 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R205 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R206 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R207 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R208 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R209 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R210 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |

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| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3030-S01 | A | PCB ASSY,TRANSPONDER PULSE | | 05/04/87 |

| STAT | REF DES. | QTY | COMP. PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R211 | - --- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R212 | - --- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R213 | - --- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R214 | - --- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R215 | - --- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R216 | - --- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R217 | 1 00 | 4702-0223-003 | RES, 5, 1/4W, 22K OHM | 00/00/00 | 99/99/99 |
| ACT | R218 | 1 00 | 4753-0203-002 | POT, 20K OHM, 62-2-1-203 | 00/00/00 | 99/99/99 |
| ACT | R219 | - --- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R220 | - --- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R221 | - --- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R222 | 1 00 | 4702-0471-003 | RES, 5, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R223 | 1 00 | 4702-0331-003 | RES, 5, 1/4W, 330 OHM | 00/00/00 | 99/99/99 |
| ACT | TP201 | 9 00 | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP202 | - --- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP203 | - --- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP204 | - --- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP205 | - --- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP206 | - --- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP207 | - --- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP208 | - --- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP209 | - --- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | X201 | 3 00 | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X202 | - --- | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X203 | 8 00 | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X204 | - --- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |



STAT ==) ACT = ACTIVE VALUE
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| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3030-S01 | A | PCB ASSY,TRANSPONDER PULSE | | 05/04/87 |

| STAT | REF DES. | QTY | COMP. PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | X205 | - --- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X206 | - --- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X207 | - --- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X208 | - --- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X209 | - --- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X210 | - --- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X211 | - --- | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X212 | 2.00 | 3131-0000-024 | IC,74LS123,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X213 | 2.00 | 3131-0000-026 | IC,74LS11,TRIPLE 3-INPUT AND | 00/00/00 | 99/99/99 |
| ACT | X214 | 6.00 | 3131-0000-016 | IC,74LS196,DEC COUNTER/LATCH | 00/00/00 | 99/99/99 |
| ACT | X215 | - --- | 3131-0000-016 | IC,74LS196,DEC COUNTER/LATCH | 00/00/00 | 99/99/99 |
| ACT | X216 | - --- | 3131-0000-016 | IC,74LS196,DEC COUNTER/LATCH | 00/00/00 | 99/99/99 |
| ACT | X217 | 1.00 | 3131-0000-032 | IC,74LS02,QUAD 2-INPUT NOR | 00/00/00 | 99/99/99 |
| ACT | X218 | - --- | 3131-0000-026 | IC,74LS11,TRIPLE 3-INPUT AND | 00/00/00 | 99/99/99 |
| ACT | X219 | - --- | 3131-0000-016 | IC,74LS196,DEC COUNTER/LATCH | 00/00/00 | 99/99/99 |
| ACT | X220 | - --- | 3131-0000-016 | IC,74LS196,DEC COUNTER/LATCH | 00/00/00 | 99/99/99 |
| ACT | X221 | - --- | 3131-0000-016 | IC,74LS196,DEC COUNTER/LATCH | 00/00/00 | 99/99/99 |
| ACT | X222 | 1.00 | 3131-0000-045 | IC,74LS138,3-TO-8 DCDR/MPLXR | 00/00/00 | 99/99/99 |
| ACT | X223 | - --- | 3131-0000-024 | IC,74LS123,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X224 | 2.00 | 3131-0000-012 | IC,74LS162A,4-BIT DEC COUNTER | 00/00/00 | 99/99/99 |
| ACT | X225 | - --- | 3131-0000-012 | IC,74LS162A,4-BIT DEC COUNTER | 00/00/00 | 99/99/99 |
| ACT | X226 | 3.00 | 3131-0000-006 | IC,74LS76A,DUAL JK FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X227 | - --- | 3131-0000-006 | IC,74LS76A,DUAL JK FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X228 | 1.00 | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X229 | 2.00 | 3131-0000-033 | IC,74LS04,HEX INVERTER | 00/00/00 | 99/99/99 |
| ACT | X230 | 1.00 | 3211-3164-000 | IC,74LS164,8-BIT REGISTER | 00/00/00 | 99/99/99 |

JUN 18 19

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 5

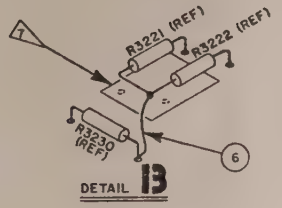
STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3030-501 | A | PCB ASSY,TRANSPONDER PULSE | | 05/04/87 |

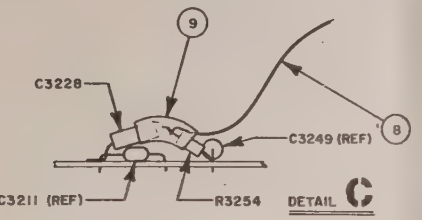
| STAT | REF.DES | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | X231 | -.-- | 3131-0000-006 | IC,74LS76A,DUAL JK FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X232 | 1.00 | 3131-0000-002 | IC,74LS10,TRIPLE 3-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X233 | 1.00 | 3131-0000-037 | IC,74LS20,DUAL 4-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X234 | -.-- | 3131-0000-033 | IC,74LS04,HEX INVERTER | 00/00/00 | 99/99/99 |

JUN 18

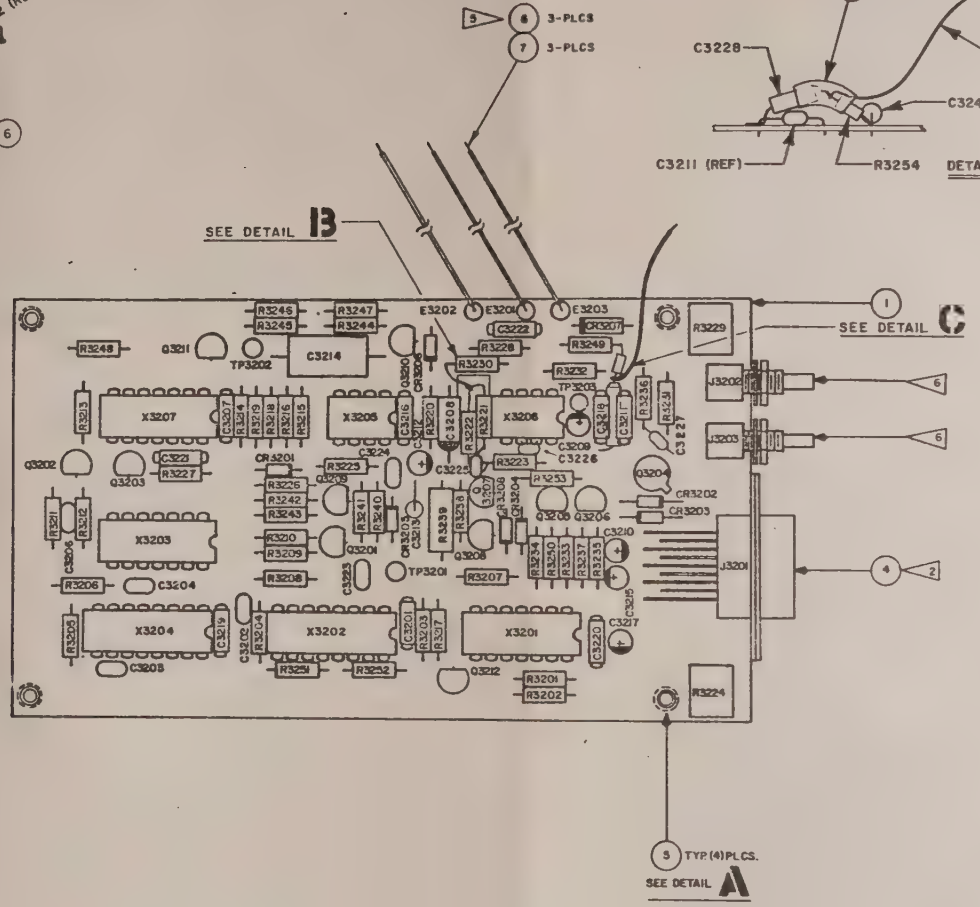
| DATE | REV | CHANGE | APP'D |
|---|---|---|---|
| 6/87 | A | DESIGN RELEASE # 1221 | |




DETAIL B

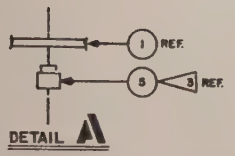



DETAIL C




NOTES:

1. REF CIRCUIT SCHEMATIC 0000-3011-401
2. REMOVE ALL HARDWARE & MOUNTING BRACKETS ON J3201 BEFORE INSTALLATION. ALIGN CONNECTOR IN MODULE FACEPLATE BEFORE SOLDERING
3. SOLDER SPACER TO BOARD
4. THIS PC BD ASSY CARRIES AN ASSIGNED REF DES SERIES OF 3200 (i.e., R1 IS R3201)
5. SOLDER 22 GA BUS WIRE APPROX 2.00" LG TO E1, E2 & E3 ON TOP SIDE - TO BE ATTACHED TO FL3101, FL3102 & FL3103
6. PUT NUT AND WASHER (INCLUDED WITH CONNECTOR) ON PC BD MOUNTING CONNECTORS
7. PUT MYLAR TAPE ON PATHWORK (1051-5201-025)

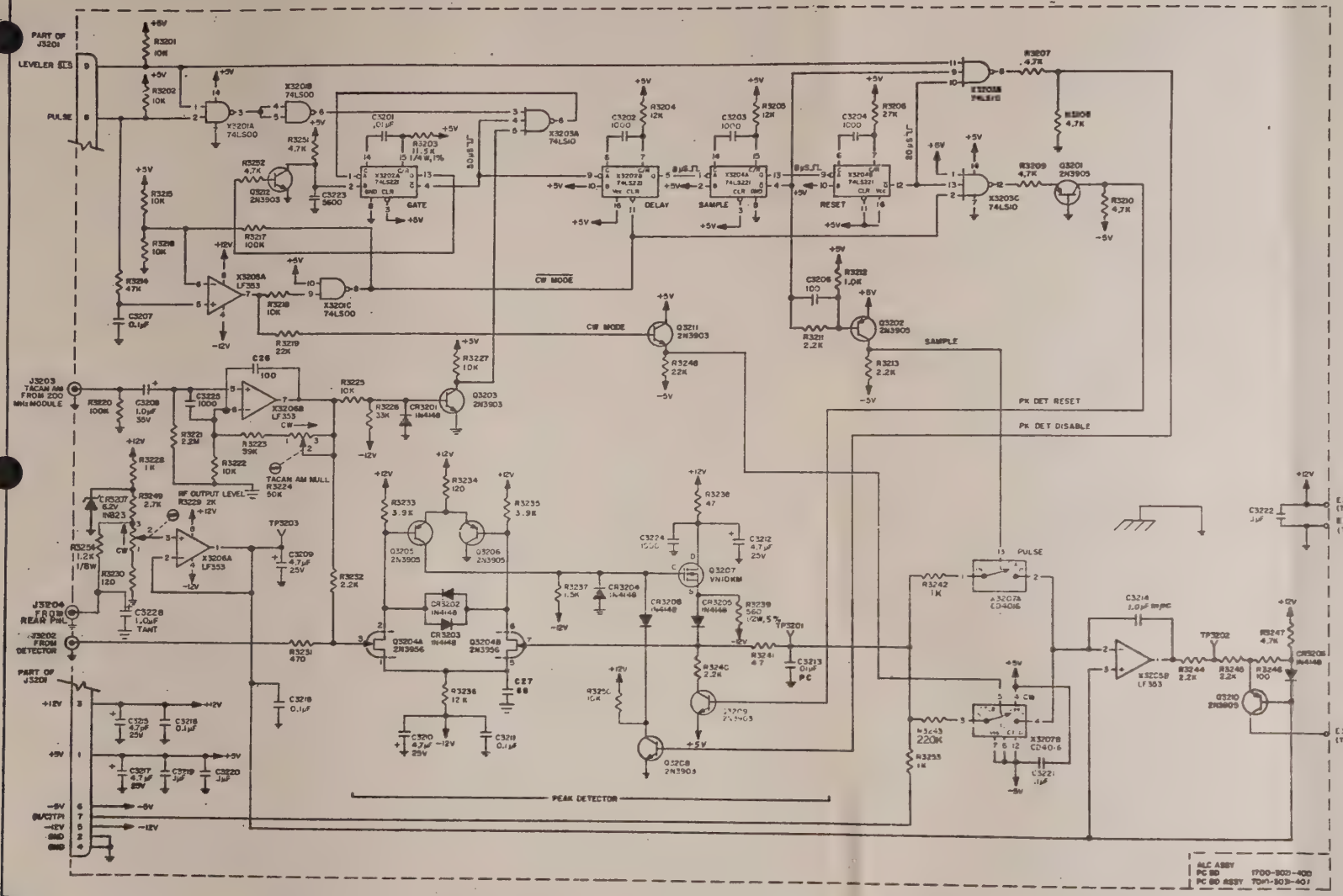



DETAIL A

JUN 18 1987

SEE SEPARATE BILL OF MATERIALS

| | | |
|---|---|---|
| TOLERANCES | - IFR INC - WICHITA KANSAS | |
| DRAWN DATE | | |
| CHECKED DATE | | |
| APPROVED DATE | PC. ASS'Y. A L C | |
| | ATC-1400A | |
| SIZE C | PART NUMBER 7010-3031-401 | REV A |
| SCALE | WEIGHT | |
| SHEET 1 OF 1 | | |




NOTES:

1. LAST REF NO. USED
   C3228 Q3212
   CR3206 R3254
   E3203 TP3204
   J3204 X3207
2. ALL RESISTORS ARE 1/4W, 10% UNLESS OTHERWISE NOTED
3. ALL RESISTANCE IS EXPRESSED IN OHMS UNLESS OTHERWISE NOTED
4. ALL CAPACITANCE IS EXPRESSED IN PICO-FARADS UNLESS OTHERWISE NOTED
5. (REF) 0000-3011-600 MIXER CIRCUIT SCHEMATIC
6. REF NO'S NOT USED
   E3205
7. IC GATE NOT USED:
   X1D

ALC ASSY
PC BD 1700-3021-400
PC BD ASSY 7041-3021-401

SEE SEPARATE BILL OF MATERIALS

ALC BOARD CIRCUIT SCHEMATIC (ATC 1400A)

0000-3011-401

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 1 STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-3031-401 REVISION A DESCRIPTION PCB ASSY,ALC LAST ECN DATE INC 05/04/87

| STAT | REF.DES. | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | | .00 | DWG-0000-3011-401 | SCHEM, ALC, ATC-1400A | 87/05/04 | 99/99/99 |
| ACT | *01 | 1.00 | 1700-3021-400 | PC BD,ALC | 00/00/00 | 99/99/99 |
| ACT | *05 | 4.00 | 2800-0000-002 | SPACER,SM,.156OD.2-56ID,.125LG | 00/00/00 | 99/99/99 |
| ACT | *06 | .00 | 1050-0000-073 | WIRE,BUS,TINNED COPPER,22GA | 00/00/00 | 99/99/99 |
| ACT | *07 | .50 | 6011-0027-001 | TUBING,TF,22 AWG,NATURAL,TU | 00/00/00 | 99/99/99 |
| ACT | *08 | .50 | 6003-0001-009 | WIRE,HOOK,TFE,30GA,SOLID,WHT | 87/04/22 | 99/99/99 |
| ACT | *09 | .10 | 6010-0125-100 | TUBING,HS, 1/8 ID,CLEAR | 87/04/22 | 99/99/99 |
| ACT | C3201 | 1.00 | 1501-0103-005 | CAP,UF .010, 50V,DISC, 10 | 00/00/00 | 99/99/99 |
| ACT | C3202 | 5.00 | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C3203 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C3204 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C3206 | 2.00 | 1506-0101-017 | CAP,PF, 100, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C3207 | 8.00 | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C3208 | 2.00 | 1507-0105-018 | CAP,UF 1.0, 35V,TANT, 20 | 00/00/00 | 99/99/99 |
| ACT | C3209 | 5.00 | 1580-4792-305 | CAP,UF 4.7, 25V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C3210 | -.-- | 1580-4792-305 | CAP,UF 4.7, 25V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C32.1 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C3212 | -.-- | 1580-4792-305 | CAP,UF 4.7, 25V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C3213 | 1.00 | 1502-0103-010 | CAP,UF .010, 50V,PC, 2 | 00/00/00 | 99/99/99 |
| ACT | C3214 | 1.00 | 1502-0105-007 | CAP,UF 1.0, 50V,MPC, 5 | 87/04/22 | 99/99/99 |
| ACT | C3215 | -.-- | 1580-4792-305 | CAP,UF 4.7, 25V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C3216 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C3217 | -.-- | 1580-4792-305 | CAP,UF 4.7, 25V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C3218 | -.-- | 1521-0000-008 | CAP,UF .10 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C3219 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C3220 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 2 STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-3031-401 REVISION A DESCRIPTION PCB ASSY,ALC LAST ECN DATE INC 05/04/87

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | C3221 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C3222 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C3223 | 1.00 | 1506-0502-017 | CAP,PF 5600, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C3224 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C3225 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C3226 | -.-- | 1506-0101-017 | CAP,PF, 100, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C3227 | 1.00 | 1506-0680-017 | CAP,PF 68, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C3228 | -.-- | 1507-0105-018 | CAP,UF 1.0, 35V,TANT, 20 | 00/00/00 | 99/99/99 |
| ACT | CR3201 | 7.00 | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR3202 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR3203 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR3204 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR3205 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR3206 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR3207 | 1.00 | 4814-0000-001 | DIODE, 1N823A ,REF,6.2V/7.5MA | 00/00/00 | 99/99/99 |
| ACT | CR3208 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | J3201 | 1.00 | 2205-3510-101 | CONN,D-SUB,M, 9-P,PCM,R.A | 00/00/00 | 99/99/99 |
| ACT | J3202 | 2.00 | 2200-2094-200 | CONN,M SMB,PC MTG,RIGHT ANGLE | 00/00/00 | 99/99/99 |
| ACT | J3203 | -.-- | 2200-2094-200 | CONN,M SMB,PC MTG,RIGHT ANGLE | 00/00/00 | 99/99/99 |
| ACT | Q3201 | 5.00 | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q3202 | -.-- | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q3203 | 5.00 | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q3204 | 1.00 | 4802-0000-005 | TRANS, 2N3956 ,N-CH JFET,DUAL | 00/00/00 | 99/99/99 |
| ACT | Q3205 | -.-- | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q3206 | -.-- | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q3207 | 1.00 | 5050-2401-000 | TRANS,VN10KM ,N-CH VMOSFET | 00/00/00 | 99/99/99 |

JUN 18 1987

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-3031-401 | REVISION A | DESCRIPTION PCB ASSY,ALC | LAST ECN | DATE INC 05/04/87

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | Q3208 | -.-- | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q3209 | -.-- | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q3210 | - -- | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q3211 | -.-- | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q3212 | -.-- | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | R3201 | 9.00 | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R3202 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R3203 | 1.00 | 4706-1152-001 | RES, 1, 1/4W, 11.5K OHM | 87/04/22 | 99/99/99 |
| ACT | R3204 | 3.00 | 4702-0123-003 | RES, 5, 1/4W, 12K OHM | 00/00/00 | 99/99/99 |
| ACT | R3205 | - -- | 4702-0123-003 | RES, 5, 1/4W, 12K OHM | 00/00/00 | 99/99/99 |
| ACT | R3206 | 1.00 | 4702-0273-003 | RES, 5, 1/4W, 27K OHM | 00/00/00 | 99/99/99 |
| ACT | R3207 | 7.00 | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R3208 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R3209 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R3210 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R3211 | 6.00 | 4702-0222-003 | RES, 5, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R3212 | 4.00 | 4702-0102-003 | RES, 5, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R3213 | -.-- | 4702-0222-003 | RES, 5, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R3214 | 1.00 | 4702-0473-003 | RES, 5, 1/4W, 47K OHM | 00/00/00 | 99/99/99 |
| ACT | R3215 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R3216 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R3217 | 2.00 | 4702-0104-003 | RES, 5, 1/4W, 100K OHM | 00/00/00 | 99/99/99 |
| ACT | R3218 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R3219 | 2.00 | 4702-0223-003 | RES, 5, 1/4W, 22K OHM | 00/00/00 | 99/99/99 |
| ACT | R3220 | - -- | 4702-0104-003 | RES, 5, 1/4W, 100K OHM | 00/00/00 | 99/99/99 |
| ACT | R3221 | 1.00 | 4702-0225-003 | RES, 5, 1/4W, 2.2MEG OHM | 00/00/00 | 99/99/99 |



STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-3031-401 | REVISION A | DESCRIPTION PCB ASSY,ALC | LAST ECN | DATE INC 05/04/87

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R3222 | - -- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R3223 | 1.00 | 4702-0393-003 | RES, 5, 1/4W, 39K OHM | 00/00/00 | 99/99/99 |
| ACT | R3224 | 1.00 | 4756-3150-300 | POT, 50K OHM, 3339W-1-503 | 00/00/00 | 99/99/99 |
| ACT | R3225 | - -- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R3226 | 1.00 | 4702-0332-003 | RES, 5, 1/4W, 33K OHM | 00/00/00 | 99/99/99 |
| ACT | R3227 | - -- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R3228 | - -- | 4702-0102-003 | RES, 5, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R3229 | 1.00 | 4756-3120-200 | POT, 2K OHM, 3339W-1-202 | 00/00/00 | 99/99/99 |
| ACT | R3230 | 2.00 | 4702-0121-003 | RES, 5, 1/4W, 120 OHM | 00/00/00 | 99/99/99 |
| ACT | R3231 | 1.00 | 4702-0471-003 | RES, 5, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R3232 | - -- | 4702-0222-003 | RES, 5, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R3233 | 2.00 | 4702-0392-003 | RES, 5, 1/4W, 3.9K OHM | 00/00/00 | 99/99/99 |
| ACT | R3234 | - -- | 4702-0121-003 | RES, 5, 1/4W, 120 OHM | 00/00/00 | 99/99/99 |
| ACT | R3235 | - -- | 4702-0392-003 | RES, 5, 1/4W, 3.9K OHM | 00/00/00 | 99/99/99 |
| ACT | R3236 | - -- | 4702-0123-003 | RES, 5, 1/4W, 12K OHM | 00/00/00 | 99/99/99 |
| ACT | R3237 | 1.00 | 4702-0152-003 | RES, 5, 1/4W, 1.5K OHM | 00/00/00 | 99/99/99 |
| ACT | R3238 | 1.00 | 4702-0470-003 | RES, 5, 1/4W, 47 OHM | 00/00/00 | 99/99/99 |
| ACT | R3239 | 1.00 | 4703-0561-003 | RES, 5, 1/2W, 560 OHM | 00/00/00 | 99/99/99 |
| ACT | R3240 | -.-- | 4702-0222-003 | RES, 5, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R3241 | 1.00 | 4702-0479-003 | RES, 5, 1/4W, 4.7 OHM | 00/00/00 | 99/99/99 |
| ACT | R3242 | - -- | 4702-0102-003 | RES, 5, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R3243 | 1.00 | 4702-0224-003 | RES, 5, 1/4W, 220K OHM | 87/04/22 | 99/99/99 |
| ACT | R3244 | - -- | 4702-0222-003 | RES, 5, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R3245 | - -- | 4702-0222-003 | RES, 5, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R3246 | 1.00 | 4702-0101-003 | RES, 5, 1/4W, 100 OHM | 00/00/00 | 99/99/99 |
| ACT | R3247 | - -- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 5 STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3031-401 | A | PCB ASSY,ALC | | 05/04/87 |

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R3248 | - -- | 4702-0223-003 | RES, S, 1/4W, 22K OHM | 00/00/00 | 99/99/99 |
| ACT | R3249 | 1 00 | 4702-0272-003 | RES, S, 1/4W, 2 7K OHM | 00/00/00 | 99/99/99 |
| ACT | R3250 | - -- | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R3251 | - -- | 4702-0472-003 | RES, S, 1/4W, 4 7K OHM | 00/00/00 | 99/99/99 |
| ACT | R3252 | - -- | 4702-0472-003 | RES, S, 1/4W, 4 7K OHM | 00/00/00 | 99/99/99 |
| ACT | R3253 | - -- | 4702-0102-003 | RES, S, 1/4W, 1 0K OHM | 00/00/00 | 99/99/99 |
| ACT | R3254 | 1 00 | 4701-0122-003 | RES, S, 1/8W, 1 2K OHM | 87/04/22 | 99/99/99 |
| ACT | TP3201 | 3 00 | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP3202 | - -- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP3203 | - -- | 2106-0000-007 | TERM,GND,USECO 9051B-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | X3201 | 1 00 | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X3202 | 2 00 | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X3203 | 1 00 | 3131-0000-002 | IC,74LS10,TRIPLE 3-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X3204 | - -- | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X3205 | 2 00 | 3221-0001-000 | IC,353,DUAL JFET OP AMP | 00/00/00 | 99/99/99 |
| ACT | X3206 | - -- | 3221-0001-000 | IC,353,DUAL JFET OP AMP | 00/00/00 | 99/99/99 |
| ACT | X3207 | 1 00 | 3133-0000-002 | IC,4016B,QUAD BILATERAL SWITCH | 00/00/00 | 99/99/99 |

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3031-401 | A | PCB ASSY,ALC | | 05/04/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DES |
|---|---|---|---|---|---|---|
| 1050-0000-073 | | WIRE,BUS,TINNED COPPER,22GA | .00 | SP | F5 | *06 |
| 1501-0103-005 | A | CAP,UF .010, 50V,DISC, 10 | 1.00 | EA | P3 | C3201 |
| 1502-0103-010 | | CAP,UF .010, 50V,PC, 2 | 1.00 | EA | P3 | C3213 |
| 1502-0105-007 | | CAP,UF 1.0, 50V,MPC, 5 | 1.00 | EA | P3 | C3214 |
| 1506-0101-017 | | CAP,PF 100, 100V,NPO, 5 | 2.00 | EA | P3 | C3206<br>C3226 |
| 1506-0102-017 | | CAP,PF 1000, 100V,NPO, 5 | 5.00 | EA | P3 | C3202<br>C3203<br>C3204<br>C3224<br>C3225 |
| 1506-0562-017 | | CAP,PF 5600, 100V,NPO, 5 | 1.00 | EA | P3 | C3223 |
| 1506-0680-017 | | CAP,PF 68, 100V,NPO, 5 | 1.00 | EA | P3 | C3227 |
| 1507-0105-018 | | CAP,UF 1.0, 35V,TANT, 20 | 2.00 | EA | P3 | C3208<br>C3228 |
| 1521-0000-008 | | CAP,UF .10, 50V,DIP,Z5U | 8.00 | EA | P3 | C3207<br>C3211<br>C3216<br>C3218<br>C3219<br>C3220<br>C3221<br>C3222 |
| 1580-4792-305 | | CAP,UF 4.7, 25V,ELE,RDL | 5.00 | EA | P3 | C3209<br>C3210<br>C3212<br>C3215<br>C3217 |
| 1700-3021-400 | A | PC BD.ALC | 1.00 | EA | P6 | *01 |



| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3031-401 | A | PCB ASSY,ALC | | 05/04/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DES |
|---|---|---|---|---|---|---|
| 2106-0000-007 | | TERM,GND,USECO 9051B-5 OR -7 | 3.00 | EA | F4 | TP3201<br>TP3202<br>TP3203 |
| 2200-2094-200 | | CONN,M SMB,PC MTG,RIGHT ANGLE | 2.00 | EA | P2 | J3202<br>J3203 |
| 2205-3518-101 | | CONN,D-SUB,M, 9-P,PCM,R.A | 1.00 | EA | P2 | J3201 |
| 2804-0000-002 | | SPACER,SM, .156OD,2-56ID, .125LG | 4.00 | EA | F4 | *05 |
| 3131-0000-002 | | IC,74LS10,TRIPLE 3-INPUT NAND | 1.00 | EA | P2 | X3203 |
| 3131-0000-017 | | IC,74LS221,DUAL MULTIVIBRATOR | 2.00 | EA | P2 | X3202<br>X3204 |
| 3131-0000-044 | | IC,74LS00,QUAD 2-INPUT NAND | 1.00 | EA | P2 | X3201 |
| 3133-0000-002 | | IC,4016B,QUAD BILATERAL SWITCH | 1.00 | EA | P2 | X3207 |
| 3221-0001-000 | | IC,353,DUAL JFET OP AMP | 2.00 | EA | P2 | X3205<br>X3206 |
| 4701-0122-003 | | RES, S, 1/8W, 1.2K OHM | 1.00 | EA | P4 | R3254 |
| 4702-0101-003 | | RES, S, 1/4W, 100 OHM | 1.00 | EA | P4 | R3246 |
| 4702-0102-003 | | RES, S, 1/4W, 1.0K OHM | 4.00 | EA | P4 | R3212<br>R3228<br>R3242<br>R3253 |
| 4702-0103-003 | | RES, S, 1/4W, 10K OHM | 9.00 | EA | P4 | R3201<br>R3202<br>R3215<br>R3216<br>R3218<br>R3222<br>R3225 |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 3

ASSY NO 7010-3031-401 REVISION A DESCRIPTION PCB ASSY,ALC LAST ECN DATE INC 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | R3227<br>R3250 |
| 4702-0184-003 | | RES, S, 1/4W, 180K OHM | 2.00 | EA | P4 | R3217<br>R3220 |
| 4702-0121-003 | | RES, S, 1/4W, 120 OHM | 2.00 | EA | P4 | R3230<br>R3234 |
| 4702-0123-003 | | RES, S, 1/4W, 12K OHM | 3.00 | EA | P4 | R3204<br>R3205<br>R3236 |
| 4702-0152-003 | | RES, S, 1/4W, 1.5K OHM | 1.00 | EA | P4 | R3237 |
| 4702-0222-003 | | RES, S, 1/4W, 2.2K OHM | 6.00 | EA | P4 | R3211<br>R3213<br>R3232<br>R3240<br>R3244<br>R3245 |
| 4702-0223-003 | | RES, S, 1/4W, 22K OHM | 2.00 | EA | P4 | R3219<br>R3248 |
| 4702-0224-003 | | RES, S, 1/4W, 220K OHM | 1.00 | EA | P4 | R3243 |
| 4702-0225-003 | | RES, S, 1/4W, 2.2MEG OHM | 1.00 | EA | P4 | R3221 |
| 4702-0272-003 | | RES, S, 1/4W, 2.7K OHM | 1.00 | EA | P4 | R3249 |
| 4702-0273-003 | | RES, S, 1/4W, 27K OHM | 1.00 | EA | P4 | R3206 |
| 4702-0333-003 | | RES, S, 1/4W, 33K OHM | 1.00 | EA | P4 | R3226 |
| 4702-0392-003 | | RES, S, 1/4W, 3.9K OHM | 2.00 | EA | P4 | R3233<br>R3235 |
| 4702-0393-003 | | RES, S, 1/4W, 39K OHM | 1.00 | EA | P4 | R3223 |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 4

ASSY NO 7010-3031-401 REVISION A DESCRIPTION PCB ASSY,ALC LAST ECN DATE INC 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 4702-0470-003 | | RES, S, 1/4W, 47 OHM | 1.00 | EA | P4 | R3238 |
| 4702-0471-003 | | RES, S, 1/4W, 470 OHM | 1.00 | EA | P4 | R3231 |
| 4702-0472-003 | | RES, S, 1/4W, 4.7K OHM | 7.00 | EA | P4 | R3207<br>R3208<br>R3209<br>R3210<br>R3247<br>R3251<br>R3252 |
| 4702-0473-003 | | RES, S, 1/4W, 47K OHM | 1.00 | EA | P4 | R3214 |
| 4702-0479-003 | | RES, S, 1/4W, 4.7 OHM | 1.00 | EA | P4 | R3241 |
| 4703-0561-003 | | RES, S, 1/2W, 560 OHM | 1.00 | EA | P4 | R3239 |
| 4706-1152-001 | | RES, T, 1/4W, 11.5K OHM | 1.00 | EA | P4 | R3203 |
| 4756-3120-200 | | POT, 2K OHM, 3339W-1-202 | 1.00 | EA | P4 | R3225 |
| 4756-3150-300 | | POT, 50K OHM, 3339W-1-503 | 1.00 | EA | P4 | R3224 |
| 4802-0000-085 | | TRANS, 2N3956 ,N-CH JFET,DUAL | 1.00 | EA | P2 | Q3204 |
| 4807-0000-081 | | TRANS, 2N3903 ,NPN HS SW | 5.00 | EA | P2 | Q3203<br>Q3208<br>Q3209<br>Q3211<br>Q3212 |
| 4807-0000-082 | | TRANS, 2N3905 ,PNP HS SW | 5.00 | EA | P2 | Q3201<br>Q3202<br>Q3205<br>Q3206<br>Q3210 |
| 4814-0000-001 | | DIODE, 1N823A ,REF,6.2V/7.5MA | 1.00 | EA | P2 | CR3207 |

JUN 18 1987

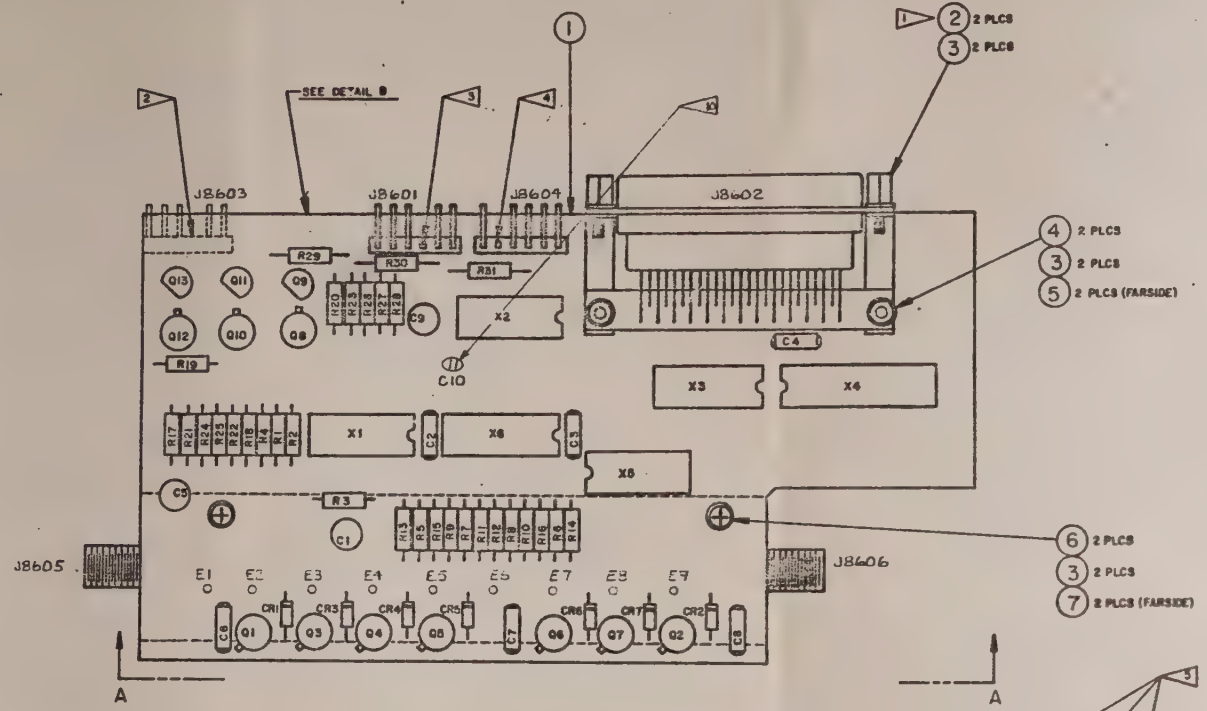
PRINT DATE 87/06/19 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 5

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3031-401 | A | PCB ASSY,ALC | | 05/04/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 4815-0000-003 | | DIODE, 1N4148 ,SIGNAL, 75PRV | 7.00 | EA | P2 | CR3201 CR3202 CR3203 CR3204 CR3205 CR3206 CR3207 |
| 5050-2401-000 | | TRANS,VN10KM ,N-CH VMOSFET | 1.00 | EA | P2 | Q3201 |
| 6003-0001-009 | | WIRE,HOOK,TFE,30GA,SOLID,WHT | .50 | FT | FS | *BE |
| 6010-0125-100 | | TUBING,HS, 1/8 ID,CLEAR | .10 | FT | FS | *C9 |
| 6011-0027-001 | | TUBING,TF,22 AWG,NATURAL,TU | 50 | FT | FS | *B7 |
| DWG-0000-3011-401 | A | SCHEM, ALC, ATC-1400A | .00 | EA | X | |

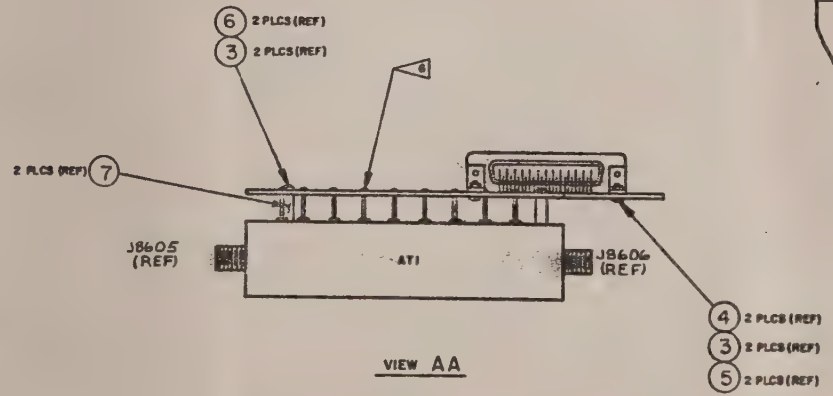
JUN 16 1987

| DATE | REV | CHANGE | APP'D |
|---|---|---|---|
| 6/6/87 | A | DESIGN RELEASE # 1218 | |

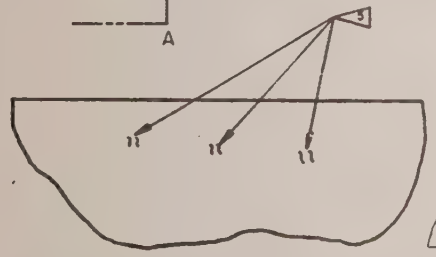



NOTES:

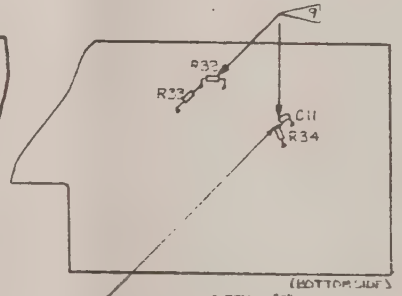
1. DISCARD THE TWO SCREWS PROVIDED WITH J2 AND REPLACE WITH HARDWARE INDICATED (ITEMS 2 and 3).
2. REMOVE PIN 3 ON J3 FOR KEYING PURPOSES.
3. REMOVE PIN 3 ON J1 FOR KEYING PURPOSES.
4. REMOVE PIN 5 ON J4 FOR KEYING PURPOSES.
5. BEFORE SOLDERING R29,R30,and R31 CUT PATHS AS SHOWN IN DETAIL A.
6. SOLDER AT1 IN PLACE AFTER SECURING IN PLACE WITH SCREWS(ITEM 6).
7. REF. DESIGNATORS ARE 8600 SERIES(i.e. R1 IS R8601).
8. REF. CIRCUIT SCHEMATIC 0000-3011-601
9. INSTALL MYLAR TAPE UNDER COMPONENTS. USE (1051-5201-025)
10. CUT PATH BEFORE INSTALLING C10




VIEW AA




DETAIL B



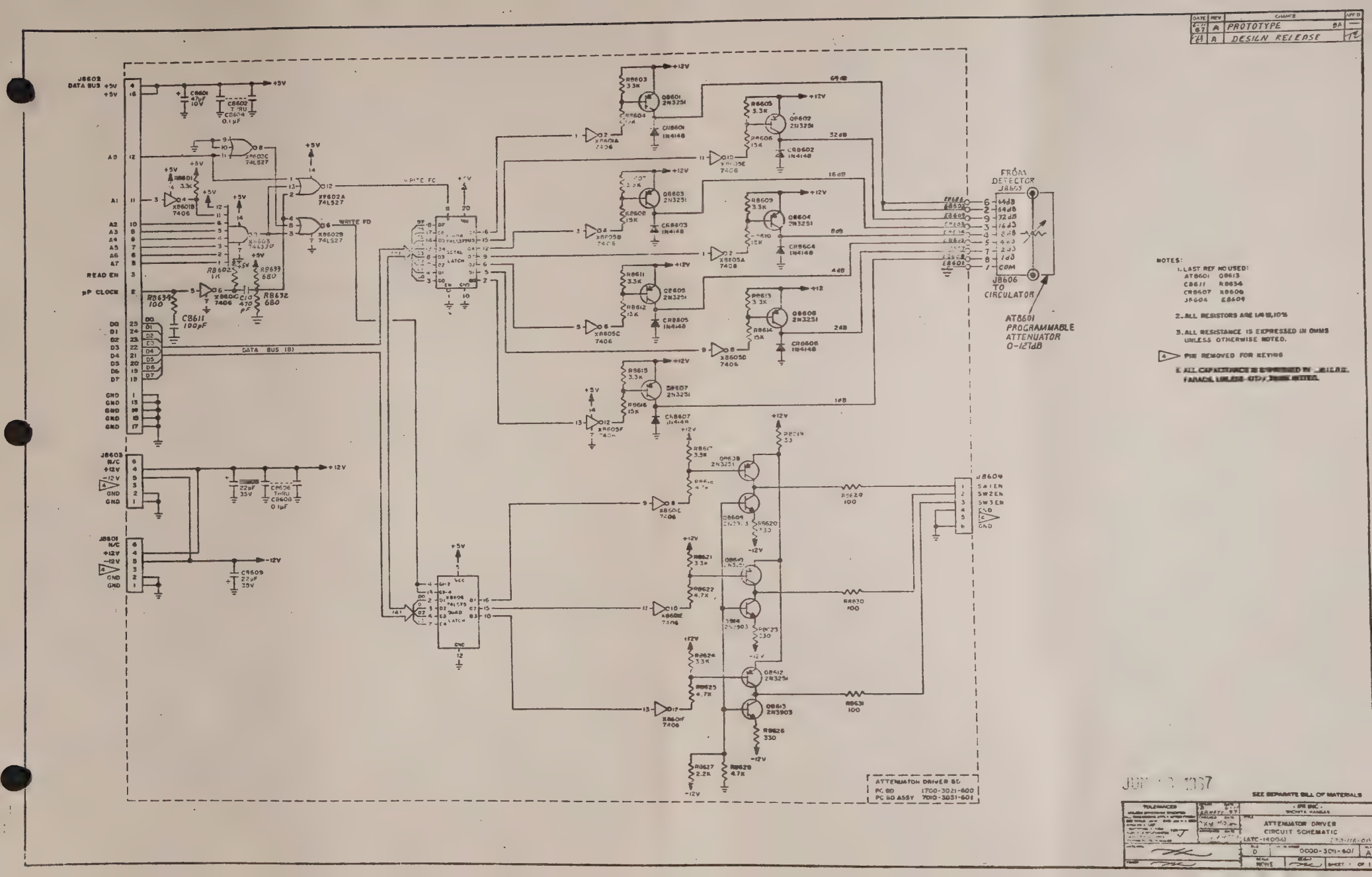

DETAIL "C"

MID AIR CONNECTION

JUN 18 1987

SEE SEPARATE BILL OF MATERIALS

| | |
|---|---|
| TOLERANCES | - BB INC. - WICHITA KANSAS |
| | P.C. BOARD ASS'Y, ATTENUATOR DRIVER ATC-1400A |
| | SIZE G — 7010-3031-601 — A |


J8602
DATA BUS +5V
+5V
GND
DATA BUS (8)
WRITE FC
WRITE FD
READ EN
pP CLOCK
J8603
R/C
+12V
-12V
J8601
J8604
SW1EN
SW2EN
SW3EN
FROM DETECTOR J8605
J8606 TO CIRCULATOR
AT8601 PROGRAMMABLE ATTENUATOR 0-127dB
64dB
32dB
16dB
8dB
4dB
2dB
1dB
COM
ATTENUATOR DRIVER BD
PC BD 1700-3021-600
PC BD ASSY 7010-3031-601
NOTES:
1. LAST REF NO USED:
AT8601 Q8613
C8611 R8634
CR8607 X8606
J8604 E8609
2. ALL RESISTORS ARE 1/4W, 10%
3. ALL RESISTANCE IS EXPRESSED IN OHMS UNLESS OTHERWISE NOTED.
PIN REMOVED FOR KEYING
5. ALL CAPACITANCE IS EXPRESSED IN MICRO FARADS, UNLESS OTHERWISE NOTED.
SEE SEPARATE BILL OF MATERIALS
ATTENUATOR DRIVER
CIRCUIT SCHEMATIC
(ATC-14004)
0000-3031-601

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3031-601 | A | PCB ASSY,ATTENUATOR DRIVER | | 01/22/85 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 1506-0101-017 | | CAP,PF, 100, 100V,NPO, 5 | 1.00 | EA | P3 | C8611 |
| 1506-0471-017 | | CAP,PF 470, 100V,NPO, 5 | 1.00 | EA | P3 | C8610 |
| 1521-0000-006 | | CAP,UF 10, 50V,DIP,Z5U | 6.00 | EA | P3 | C8602<br>C8603<br>C8604<br>C8606<br>C8607<br>C8608 |
| 1580-2202-420 | | CAP,UF 22, 35V,ELE,RDL | 2.00 | EA | P3 | C8605<br>C8609 |
| 1580-4702-105 | | CAP,UF 47, 10V,ELE,RDL | 1.00 | EA | P3 | C8601 |
| 1700-3021-600 | A | PC BD,ATTENUATOR DRIVER | 1.00 | EA | P5 | #01 |
| 2115-1002-006 | | CONN,MOLEX 22-05-2061 | 3.00 | EA | P2 | J8601<br>J8603<br>J8604 |
| 2116-0000-021 | | CONN,D-SUB,M,25-P,PCH,R.A | 1.00 | EA | P2 | J8602 |
| 2600-7600-132 | UU | SPACER,AL,.187OD,.125ID, 250LG | 2.00 | EA | S7 | #07 |
| 2803-0313-006 | | SCREW,4-40 X 5/16 PPHM | 2.00 | EA | F4 | #05 |
| 2803-0500-006 | | SCREW,4-40 X 1/2 PPHM | 2.00 | EA | F4 | #06 |
| 2840-0000-003 | | WASHER,LOCK,INT TOOTH,4 | 6.00 | EA | F4 | #03 |
| 2850-0300-026 | | NUT,HEX,SMALL PAT,4-40 | 2.00 | EA | F4 | #04 |
| 2850-7601-301 | X | SCREW,.188L4-40.19HH,4-40X.300 | 2.00 | EA | F4 | #02 |
| 2901-7633-000 | D | ATTEN,STEP,1-127DB,1U SMA,FROG | 1.00 | EA | P2 | ATS601 |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 2

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3031-601 | A | PCB ASSY,ATTENUATOR DRIVER | | 01/22/85 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 3130-0000-027 | | IC,7406,HEX INV BUFFER/DRIVER | 2.00 | EA | P2 | XS601<br>XS605 |
| 3131-0000-005 | | IC,74LS75,4-BIT BISTABLE LATCH | 1.00 | EA | P2 | X8606 |
| 3131-0000-025 | | IC,74LS27,TRIPLE 3-INPUT NOR | 1.00 | EA | P2 | X8602 |
| 3131-0000-027 | | IC,74LS30,8-INPUT NAND | 1.00 | EA | P2 | X8603 |
| 3131-0000-043 | | IC,74LS377,OCTAL D FLIP-FLOP | 1.00 | EA | P2 | X8604 |
| 4701-0101-003 | | RES, 5, 1/8W, 100 OHM | 1.00 | EA | P4 | R8634 |
| 4701-0681-003 | | RES, 5, 1/8W, 680 OHM | 2.00 | EA | P4 | R8635<br>R8633 |
| 4702-0101-003 | | RES, 5, 1/4W, 100 OHM | 3.00 | EA | P4 | R8629<br>R8630<br>R8631 |
| 4702-0102-003 | | RES, 5, 1/4W, 1.0K OHM | 1.00 | EA | P4 | R8602 |
| 4702-0153-003 | | RES, 5, 1/4W, 15K OHM | 7.00 | EA | P4 | R8604<br>R8606<br>R8608<br>R8610<br>R8612<br>R8614<br>R8616 |
| 4702-0222-003 | | RES, 5, 1/4W, 2.2K OHM | 1.00 | EA | P4 | R8627 |
| 4702-0330-003 | | RES, 5, 1/4W, 33 OHM | 1.00 | EA | P4 | R8619 |
| 4702-0331-003 | | RES, 5, 1/4W, 330 OHM | 3.00 | EA | P4 | R8620<br>R8623<br>R8626 |
| 4702-0332-003 | | RES, 5, 1/4W, 3.3K OHM | 11.00 | EA | P4 | |

JUN 18 1987

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3031-601 | A | PCB ASSY,ATTENUATOR DRIVER | | 01/22/85 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U M | S C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | R8507<br>R8603<br>R8605<br>R8607<br>R8609<br>R8611<br>R8613<br>R8615<br>R8617<br>R8621<br>R8624 |
| 4702-0472-003 | | RES 5, 1/4W, 4.7k OHM | 4.00 | EA | P4 | R8618<br>R8620<br>R8625<br>R8628 |
| 4805-0000-001 | | TRANS,2N2907A,PNP HS SW (32511 | 10.00 | EA | P2 | Q8601<br>Q8602<br>Q8603<br>Q8604<br>Q8605<br>Q8606<br>Q8607<br>Q8608<br>Q8610<br>Q8612 |
| 4807-0000-001 | | TRANS, 2N3903 ,NPN HS SW | 3.00 | EA | P2 | Q8609<br>Q8611<br>Q8613 |
| 4815-0000-003 | | DIODE, 1N4148 ,SIGNAL, 75PRV | 7.00 | EA | P2 | CR8601<br>CR8602<br>CR8603<br>CR8604<br>CR8605<br>CR8606<br>CR8607 |
| DWG-0000-3011-601 | B | SCHEM,ATTENUATOR DRIVER, 1400A | 00 | EA | X | |

JUN 18 1987

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 1

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-3031-601 REVISION A DESCRIPTION PCB ASSY,ATTENUATOR DRIVER LAST ECN DATE INC 01/22/85

| STAT | REF.DES | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | | .00 | 0UC-0000-3011-601 | SCHEM,ATTENUATOR DRIVER, 1400A | 87/05/05 | 99/99/99 |
| ACT | *01 | 1.00 | 1700-3021-600 | PC BD,ATTENUATOR DRIVER | 00/00/00 | 99/99/99 |
| ACT | *02 | 2.00 | 2850-7601-301 | SCREW, 188L4-40 19HH,4-40X 300 | 00/00/00 | 99/99/99 |
| ACT | *03 | 6.00 | 2940-0000-003 | WASHER,LOCK,INT TOOTH,4 | 00/00/00 | 99/99/99 |
| ACT | *04 | 2.00 | 2850-0000-020 | NUT,HEX,SMALL PAT,4-40 | 00/00/00 | 99/99/99 |
| ACT | *05 | 2.00 | 2803-0313-006 | SCREW,4-40 X 5/16 PPHM | 00/00/00 | 99/99/99 |
| ACT | *06 | 2.00 | 2803-0500-006 | SCREW,4-40 X 1/2 PPHM | 00/00/00 | 99/99/99 |
| ACT | *07 | 2.00 | 2900-7600-132 | SPACER,AL, 1870D, 125ID,.250LG | 00/00/00 | 99/99/99 |
| ACT | AT8601 | 1.00 | 2301-7623-000 | ATTEN,STEP,1-127DB,1W,SMA,PROG | 00/00/00 | 99/99/99 |
| ACT | C8601 | 1.00 | 1580-4702-105 | CAP,UF 47. 10V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C8602 | 6.00 | 1521-0000-008 | CAP,UF .10. 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C8603 | -.-- | 1521-0000-008 | CAP,UF .10. 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C8604 | - -- | 1521-0000-008 | CAP,UF .10. 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C8605 | 2.00 | 1580-2202-420 | CAP,UF 22. 35V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C8606 | -.-- | 1521-0000-008 | CAP,UF .10. 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C8607 | -.-- | 1521-0000-008 | CAP,UF .10. 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C8608 | - -- | 1521-0000-008 | CAP,UF .10. 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C8609 | - -- | 1580-2202-420 | CAP,UF 22. 35V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C8610 | 1.00 | 1506-0471-017 | CAP,PF 470. 100V,NPO, 5 | 87/04/22 | 99/99/99 |
| ACT | C8611 | 1.00 | 1506-0101-017 | CAP,PF 100, 100V,NPO, 5 | 87/04/22 | 99/99/99 |
| ACT | CR8601 | 7.00 | 4815-0000-002 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR8602 | - -- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR8603 | - -- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR8604 | - -- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR8605 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR8606 | - -- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL 75PRV | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 2

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-3031-601 REVISION A DESCRIPTION PCB ASSY,ATTENUATOR DRIVER LAST ECN DATE INC 01/22/85

| STAT | REF DES | QTY | COMP. PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | CR8607 | - -- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL 75PRV | 00/00/00 | 99/99/99 |
| ACT | J8601 | 3.00 | 2115-1002-006 | CONN,MOLEX 22-05-2061 | 00/00/00 | 99/99/99 |
| ACT | J8602 | 1.00 | 2116-0000-021 | CONN,D-SUB,M,25-P PCM,R A | 00/00/00 | 99/99/99 |
| ACT | J8603 | -.-- | 2115-1002-006 | CONN,MOLEX 22-05-2061 | 00/00/00 | 99/99/99 |
| ACT | J8604 | - -- | 2115-1002-006 | CONN,MOLEX 22-05-2061 | 00/00/00 | 99/99/99 |
| ACT | Q8601 | 10.00 | 4805-0000-001 | TRANS,2N2907A,PNP HS SW (3251) | 00/00/00 | 99/99/99 |
| ACT | Q8602 | - -- | 4805-0000-001 | TRANS,2N2907A,PNP HS SW (3251) | 00/00/00 | 99/99/99 |
| ACT | Q8603 | - -- | 4805-0000-001 | TRANS,2N2907A,PNP HS SW (3251) | 00/00/00 | 99/99/99 |
| ACT | Q8604 | -.-- | 4805-0000-001 | TRANS,2N2907A,PNP HS SW (3251) | 00/00/00 | 99/99/99 |
| ACT | Q8605 | - -- | 4805-0000-001 | TRANS,2N2907A,PNP HS SW (3251) | 00/00/00 | 99/99/99 |
| ACT | Q8606 | -.-- | 4805-0000-001 | TRANS,2N2907A,PNP HS SW (3251) | 00/00/00 | 99/99/99 |
| ACT | Q8607 | -.-- | 4805-0000-001 | TRANS,2N2907A,PNP HS SW (3251) | 00/00/00 | 99/99/99 |
| ACT | Q8608 | - -- | 4805-0000-001 | TRANS,2N2907A,PNP HS SW (3251) | 00/00/00 | 99/99/99 |
| ACT | Q8609 | 3.00 | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q8610 | -.-- | 4805-0000-001 | TRANS,2N2907A,PNP HS SW (3251) | 00/00/00 | 99/99/99 |
| ACT | Q8611 | -.-- | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q8612 | -.-- | 4805-0000-001 | TRANS,2N2907A,PNP HS SW (3251) | 00/00/00 | 99/99/99 |
| ACT | Q8613 | -.-- | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | R8601 | 11.00 | 4702-0332-003 | RES, 5, 1/4W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R8602 | 1.00 | 4702-0102-003 | RES, 5, 1/4W, 1.0K OHM | 87/04/22 | 99/99/99 |
| ACT | R8603 | -.-- | 4702-0332-003 | RES, 5, 1/4W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R8604 | 7.00 | 4702-0153-003 | RES, 5, 1/4W, 15K OHM | 00/00/00 | 99/99/99 |
| ACT | R8605 | -.-- | 4702-0332-003 | RES, 5, 1/4W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R8606 | -.-- | 4702-0153-003 | RES, 5, 1/4W, 15K OHM | 00/00/00 | 99/99/99 |
| ACT | R8607 | - -- | 4702-0332-003 | RES, 5, 1/4W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R8608 | -.-- | 4702-0153-003 | RES, 5, 1/4W, 15K OHM | 00/00/00 | 99/99/99 |

JUN 13 1987

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-3031-601 REVISION A
DESCRIPTION PCB ASSY,ATTENUATOR DRIVER
LAST ECN
DATE INC 01/22/85

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R8609 | -.-- | 4702-0332-003 | RES, S, 1/4W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R8610 | -.-- | 4702-0153-003 | RES, S, 1/4W, 15K OHM | 00/00/00 | 99/99/99 |
| ACT | R8611 | -.-- | 4702-0332-003 | RES, S, 1/4W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R8612 | -.-- | 4702-0153-003 | RES, S, 1/4W, 15K OHM | 00/00/00 | 99/99/99 |
| ACT | R8613 | -.-- | 4702-0332-003 | RES, S, 1/4W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R8614 | -.-- | 4702-0153-003 | RES, S, 1/4W, 15K OHM | 00/00/00 | 99/99/99 |
| ACT | R8615 | -.-- | 4702-0332-003 | RES, S, 1/4W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R8616 | -.-- | 4702-0153-003 | RES, S, 1/4W, 15K OHM | 00/00/00 | 99/99/99 |
| ACT | R8617 | -.-- | 4702-0332-003 | RES, S, 1/4W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R8618 | 4.00 | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R8619 | 1.00 | 4702-0330-003 | RES, S, 1/4W, 33 OHM | 00/00/00 | 99/99/99 |
| ACT | R8620 | 3.00 | 4702-0331-003 | RES, S, 1/4W, 330 OHM | 00/00/00 | 99/99/99 |
| ACT | R8621 | -.-- | 4702-0332-003 | RES, S, 1/4W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R8622 | -.-- | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R8623 | -.-- | 4702-0331-003 | RES, S, 1/4W, 330 OHM | 00/00/00 | 99/99/99 |
| ACT | R8624 | -.-- | 4702-0332-003 | RES, S, 1/4W, 3.3K OHM | 00/00/00 | 99/99/99 |
| ACT | R8625 | -.-- | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R8626 | -.-- | 4702-0331-003 | RES, S, 1/4W, 330 OHM | 00/00/00 | 99/99/99 |
| ACT | R8627 | 1.00 | 4702-0222-003 | RES, S, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R8628 | -.-- | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R8629 | 3.00 | 4702-0101-003 | RES, S, 1/4W, 100 OHM | 00/00/00 | 99/99/99 |
| ACT | R8630 | -.-- | 4702-0101-003 | RES, S, 1/4W, 100 OHM | 00/00/00 | 99/99/99 |
| ACT | R8631 | -.-- | 4702-0101-003 | RES, S, 1/4W, 100 OHM | 00/00/00 | 99/99/99 |
| ACT | R8632 | 2.00 | 4701-0681-003 | RES, S, 1/8W, 680 OHM | 87/04/22 | 99/99/99 |
| ACT | R8633 | -.-- | 4701-0681-003 | RES, S, 1/8W, 680 OHM | 87/04/22 | 99/99/99 |
| ACT | R8634 | 1.00 | 4701-0101-003 | RES, S, 1/8W, 100 OHM | 87/04/22 | 99/99/99 |

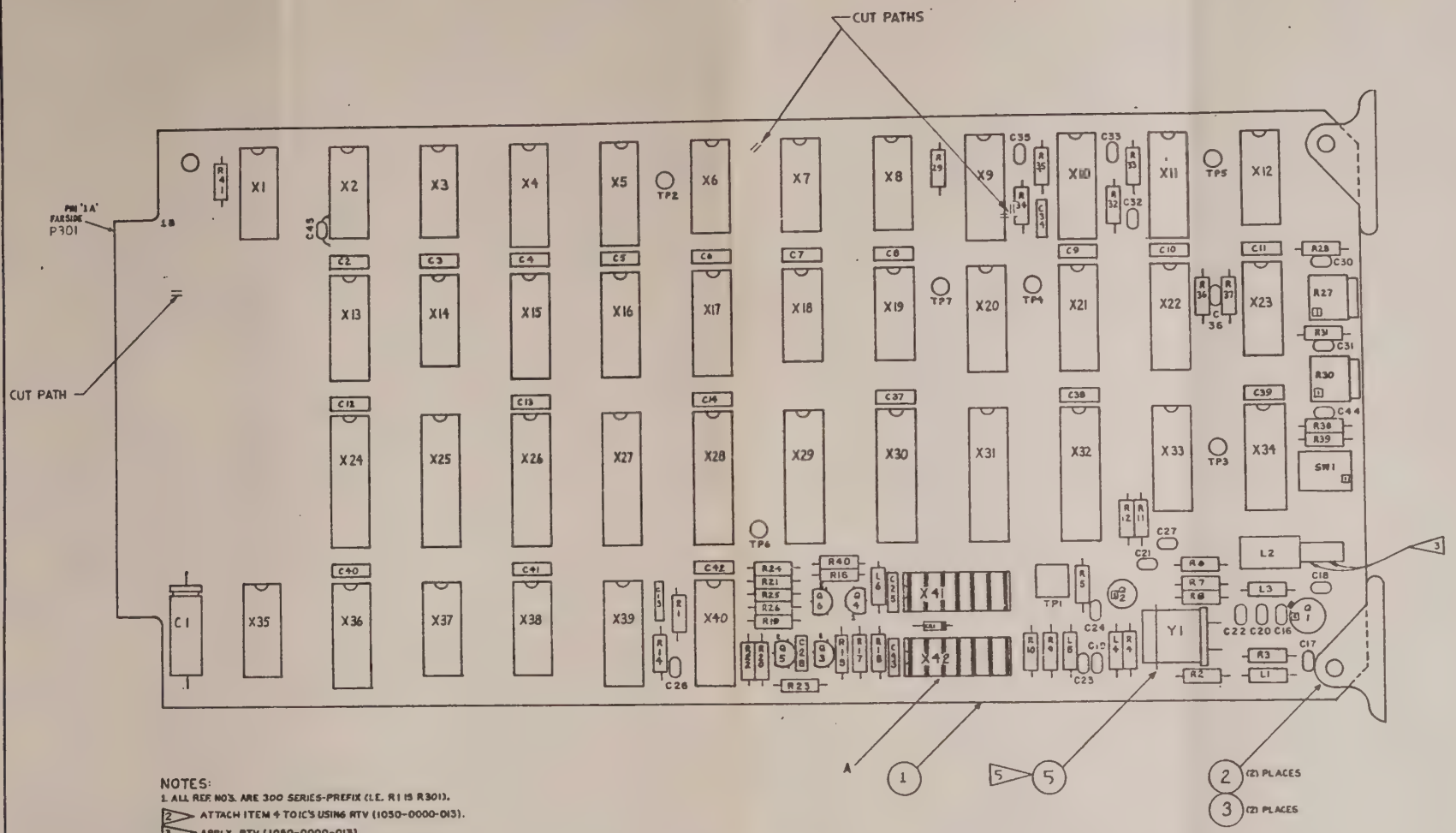


STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-3031-601 REVISION A
DESCRIPTION PCB ASSY,ATTENUATOR DRIVER
LAST ECN
DATE INC 01/22/85

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | X8601 | 2.00 | 3130-0000-027 | IC,7404,HEX INV BUFFER/DRIVER | 00/00/00 | 99/99/99 |
| ACT | X8602 | 1.00 | 3131-0000-025 | IC,74LS27,TRIPLE 3-INPUT NOR | 00/00/00 | 99/99/99 |
| ACT | X8603 | 1.00 | 3131-0000-027 | IC,74LS30,8-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X8604 | 1.00 | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X8605 | -.-- | 3130-0000-027 | IC,7406,HEX INV BUFFER/DRIVER | 00/00/00 | 99/99/99 |
| ACT | X8606 | 1.00 | 3131-0000-005 | IC,74LS75,4-BIT BISTABLE LATCH | 00/00/00 | 99/99/99 |

| DATE | REV | CHANGE |
|---|---|---|
| 6/21/87 | A | DESIGN RELEASE |




NOTES:

1. ALL REF NO'S. ARE 300 SERIES-PREFIX (I.E. R1 IS R301).
2. ATTACH ITEM 4 TO IC'S USING RTV (1050-0000-013).
3. APPLY RTV (1050-0000-013).
4. USE TAK-PAK ADHESIVE AS REQUIRED. (1051-0100-100)
5. CRYSTAL CASE MUST NOT BE HEATED. DO NOT ALLOW SOLDER TO FLOW OR COME IN CONTACT WITH CRYSTAL CASE.

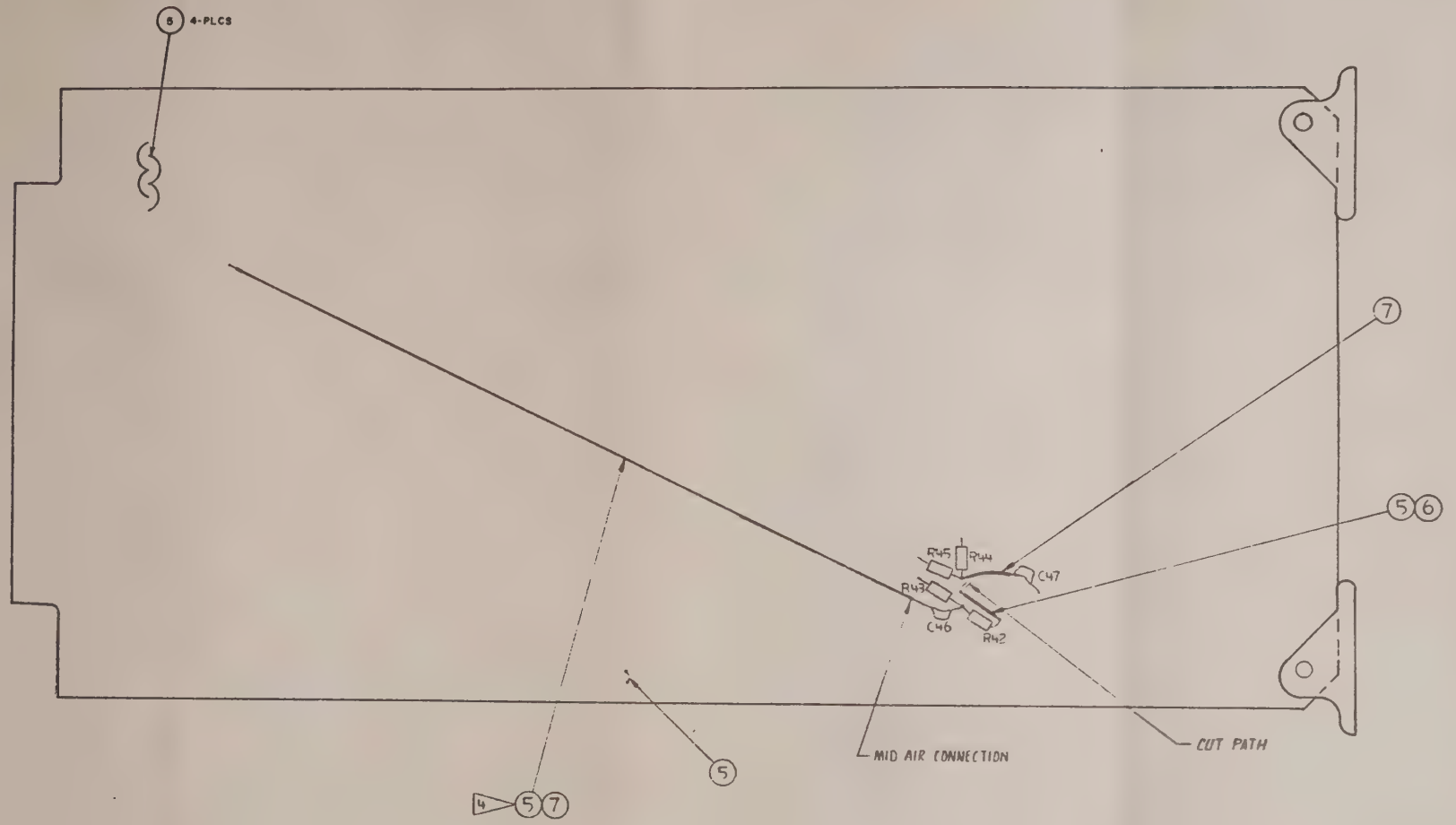



DETAIL 'A'
SCALE: (NONE)

JUN 18 1987

| | | | |
|---|---|---|---|
| TOLERANCES | RB 4-9-87 | -IFR INC- WICHITA, KANSAS | |
| NEXT ASSY / QTY / MODEL / APPLICATION | | TITLE P.C. BD. ASSY- DECODER ATC 1400A | |
| | | ITEM C | PART NUMBER 7010-3032-B01 REV A |
| | | SCALE 2:1 | SHEET 1 OF 2 |

| DATE | REV | |
|---|---|---|
| | | SEE SHT 1 |




JUN 18 1987

SEE SEPARATE BILL OF MATERIALS

| TOLERANCES | DRAWN | DATE |
|---|---|---|
| UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN DECIMAL FRACTIONS ANGLES SURFACE EQUIVALENCE REMOVE ALL BURRS | RB | 6-9-87 |
| | CHECKED | |
| | ENGINEER | |
| | MFG | |
| | APPROVED | |

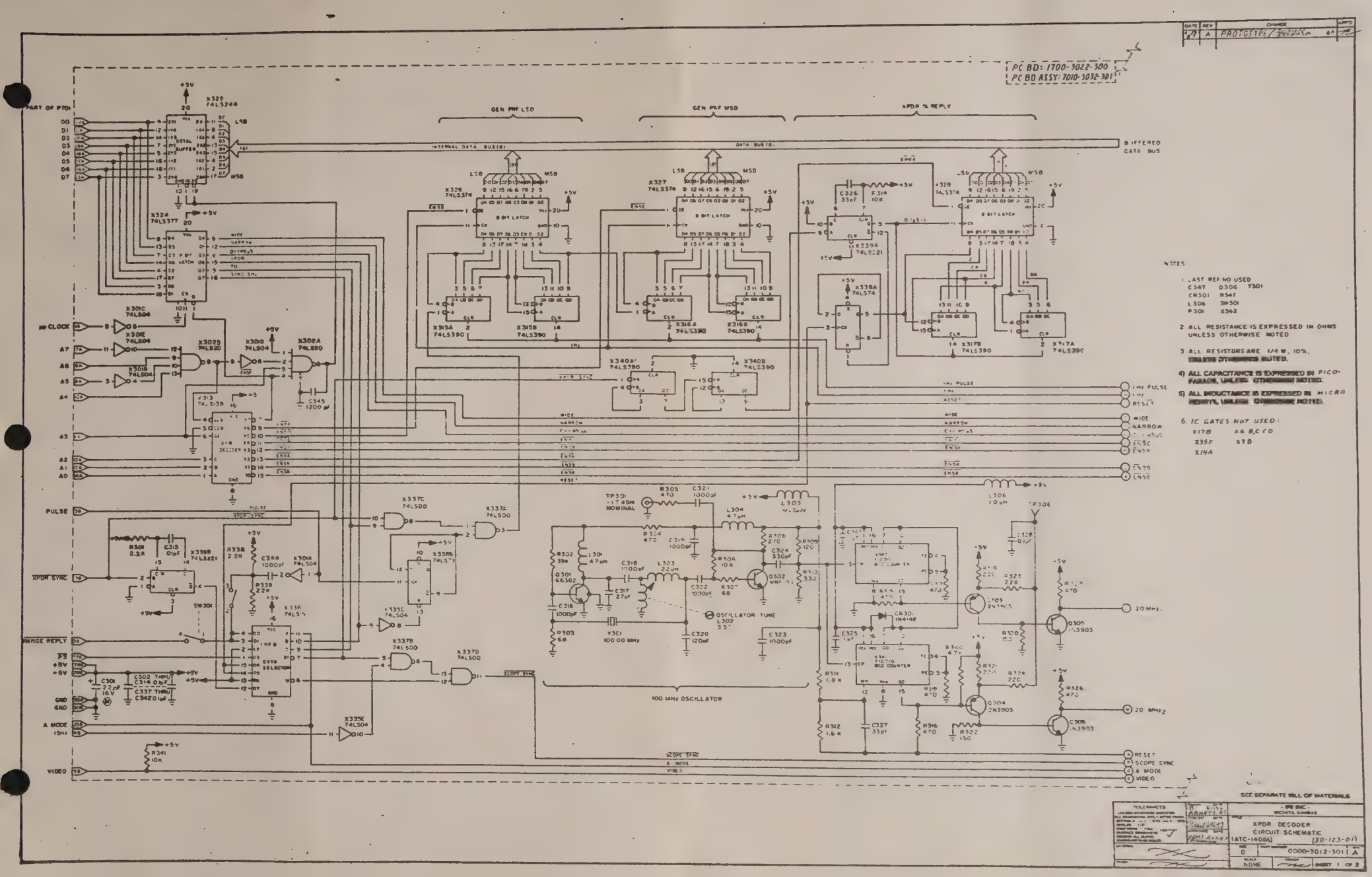
- BFI INC -
WICHITA KANSAS

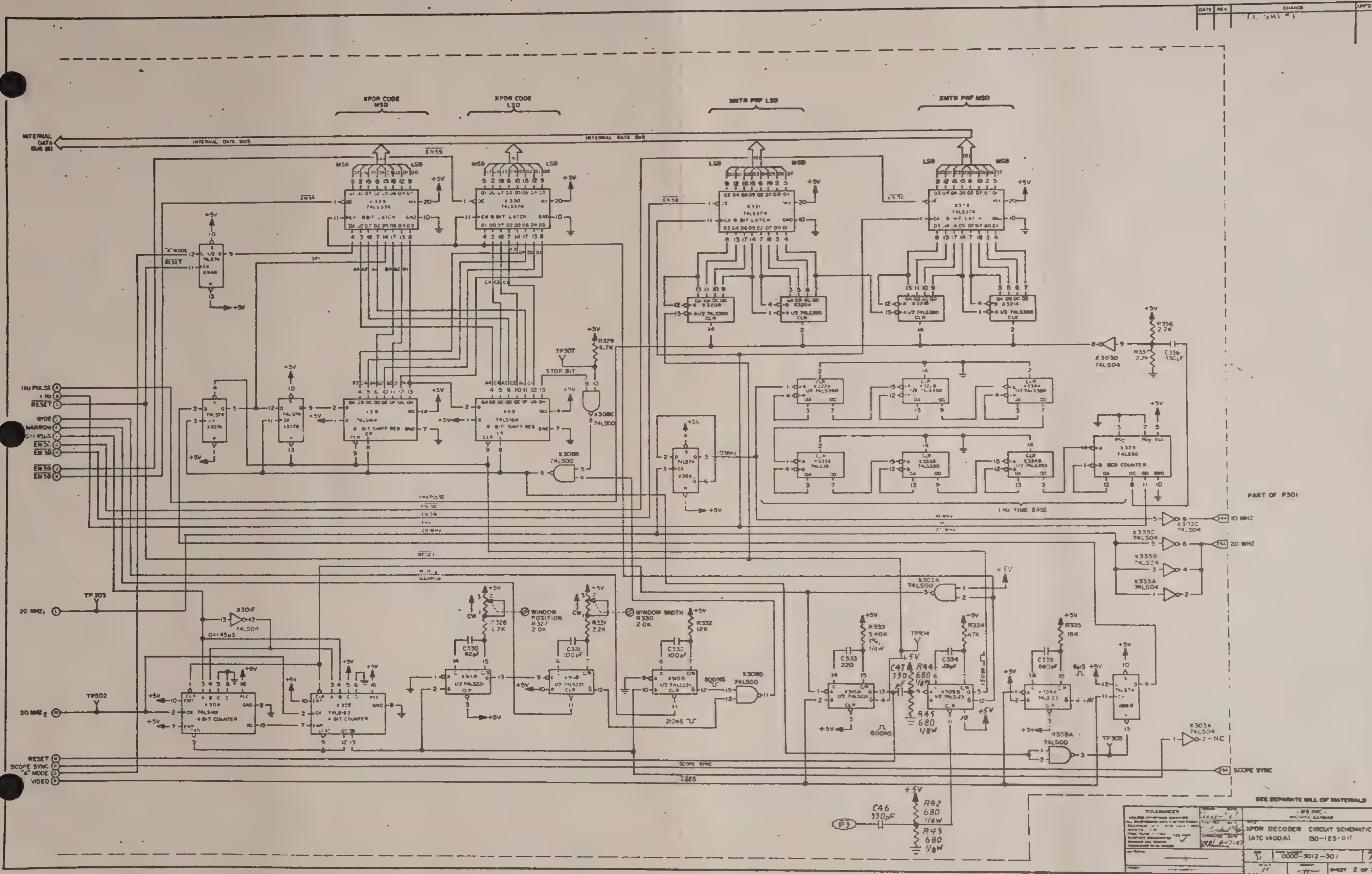
P C BOARD ASSY - DECODER

ATC1400A

| SIZE | PART NUMBER | REV |
|---|---|---|
| C | 7010-3032-301 | A |

SCALE 2:1 — SHEET 2 OF 2


PC BD: 1700-3022-300
PC BD ASSY: 7010-3032-301
PROTOTYPE
GEN PRF LED
GEN PRF MSD
XPDR % REPLY
INTERNAL DATA BUS(8)
DATA BUS(8)
BUFFERED DATA BUS
PART OF PTOI
X325 74LS244
X324 74LS377
X326 74LS374
X327 74LS374
X328 74LS374
X329A 74LS221
X338A 74LS74
X316A 74LS390
X316B 74LS390
X317A 74LS390
X317B 74LS390
X340A 74LS390
X340B 74LS390
X313 74LS138
X301C 74LS04
X301E 74LS04
X301B 74LS04
X302B 74LS20
X301D 74LS04
X302A 74LS20
X337C 74LS00
X337A 74LS00
X339B 74LS221
X301A 74LS04
X336 74LS157
X335E 74LS04
X337B 74LS00
X337D 74LS00
X335F 74LS04
X339A 74LS74
X335A 74LS390
X335B 74LS390
X335C 74LS390
X335D 74LS390
X335E 74LS04
TP301 +17.45m NOMINAL
L305 4.3μH
L304 47μH
L301 47μH
L303 22μH
L302 35T
OSCILLATOR TUNE
Y301 100.00 MHz
Q301 66362
Q302 MPS-3
Q303 2N3905
Q304 2N3905
Q305 2N3903
Q306 2N3903
CR301 1N6148
100 MHz OSCILLATOR
SW301
XPDR SYNC
RANGE REPLY
PULSE
A MODE 1 MHz
VIDEO
SCOPE SYNC
1 MHz PULSE
WIDE
NARROW
RESET
20 MHz
20 MHz/2
NOTES
1. LAST REF NO USED
C347 Q306 Y301
CR301 R345
L306 SW301
P301 X342
2. ALL RESISTANCE IS EXPRESSED IN OHMS UNLESS OTHERWISE NOTED
3. ALL RESISTORS ARE 1/4 W, 10%, UNLESS OTHERWISE NOTED.
4) ALL CAPACITANCE IS EXPRESSED IN PICO-FARADS, UNLESS OTHERWISE NOTED.
5) ALL INDUCTANCE IS EXPRESSED IN MICRO HENRYS, UNLESS OTHERWISE NOTED.
6. IC GATES NOT USED:
X17B X6 B,C,D
X35F X9B
X14A
SEE SEPARATE BILL OF MATERIALS
ARNEY BD
XPDR DECODER
CIRCUIT SCHEMATIC
(ATC-1400A)
(30-123-01)
0000-3012-301
A
NONE
SHEET 1 OF 2


XPDR CODE MSD
XPDR CODE LSD
XMTR PRF LSD
XMTR PRF MSD
INTERNAL DATA BUS (8)
INTERNAL DATA BUS
EN59
EN58
EN5C
MSB
LSB
X329 74LS374 8 BIT LATCH
X330 74LS374 8 BIT LATCH
X331 74LS374 8 BIT LATCH
74LS374
X318 74LS164 8 BIT SHIFT REG
X319 74LS164 8 BIT SHIFT REG
X320B 1/2 74LS390
X320A 1/2 74LS390
X321B 1/2 74LS390
X321A 1/2 74LS390
X322A 1/2 74LS390
X334A 1/2 74LS390
X333A 74LS390
X333B 74LS390
X334B 1/2 74LS390
X323 74LS90 BCD COUNTER
1 Hz TIME BASE
X303D 74LS04
R336 2.2K
R337 2.7K
C336 330pF
R329 4.7K
TP307
STOP BIT
X308C 74LS00
X308B 74LS00
X307A 74LS74
X307B 74LS74
X302A 74LS74
1 Hz PULSE
1 Hz
RESET
WIDE
NARROW
0=1.45μS
EN 5C
EN 58
EN 59
EN 58
"A" MODE
SPI
PART OF P301
10 MHZ
20 MHZ
X303C 74LS04
X335C 74LS04
X335B 74LS04
X335A 74LS04
20 MHZ1
TP303
20 MHZ2
TP302
X301F 74LS04
0=1.45μS
X304 74LS162 4 BIT COUNTER
X305 74LS162 4 BIT COUNTER
X310A 1/2 74LS221
X310B 1/2 74LS221
C330 82pF
R328 2.2K
WINDOW POSITION R327 2.0K
C331 100pF
R331 2.2K
WINDOW WIDTH R330 2.0K
R332 12K
C332 100pF
800NS
210nS
X308D 74LS00
X305A 74LS00
R333 3.40K 1% 1/4W
C333 220
TP304
C47 330pF
R44 680 1/8W
R45 680 1/8W
X309A 1/2 74LS221
600NS
R334 47K
C334 .01pF
X309B 1/2 74LS123
150NS
R335 18K
C335 680pF
6μS
X309A 74LS123
74LS74
X308A 74LS00
TP305
X303A 74LS04
2-NC
RESET
SCOPE SYNC
"A" MODE
VIDEO
SCOPE SYNC
C46 330pF
P3
R42 680 1/8W
R43 680 1/8W
CW
+5V
DATE
REV
CHANGE
APP'D
SEE SEPARATE BILL OF MATERIALS
TOLERANCES
KING RADIO INC.
XPDR DECODER CIRCUIT SCHEMATIC
(ATC 1400A)
(30-123-01)
0000-3012-301
A
SHEET 2 OF 2

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | B 457 | 05/14/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 0003-0000-008 | | ***** FOR REFERENCE ONLY ***** | 1.00 | EA | F | P301 |
| 1050-0000-075 | | WIRE,BUS,TINNED COPPER,26GA | .00 | SF | F5 | *05 |
| 1501-0103-005 | A | CAP,UF .010, 50V,DISC, 10 | 2.00 | EA | P3 | C315 C334 |
| 1506-0101-017 | | CAP,PF, 100, 100V,NPO, 5 | 2.00 | EA | P3 | C331 C332 |
| 1506-0102-017 | | CAP,PF 1000, 100V,NPO, 5 | 7.00 | EA | P3 | C316 C318 C319 C321 C322 C323 C344 |
| 1506-0121-017 | | CAP,PF 120, 100V,NPO 5 | 1.00 | EA | P3 | C320 |
| 1506-0122-017 | | CAP,PF 1200, 100V,NPO, 5 | 1.00 | EA | P3 | C345 |
| 1506-0221-017 | | CAP,PF 220, 100V,NPO, 5 | 1.00 | EA | P3 | C333 |
| 1506-0270-017 | | CAP,PF 27, 100V,NPO, 5 | 1.00 | EA | P3 | C317 |
| 1506-0330-017 | | CAP,PF 33, 100V,NPO 5 | 2.00 | EA | P3 | C326 C327 |
| 1506-0331-017 | | CAP,PF 330, 100V,NPO, 5 | 4.00 | EA | P3 | C324 C336 C346 C347 |
| 1506-0681-017 | | CAP,PF 680, 100V,NPO, 5 | 1.00 | EA | P3 | C335 |
| 1506-0820-017 | | CAP,PF 82, 100V,NPO 5 | 1.00 | EA | P3 | C330 |
| 1521-0000-008 | | CAP,UF .10, 50V,DIP,Z5U | 22.00 | EA | P3 | |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 2

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | B 457 | 05/14/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | C302 C303 C304 C305 C306 C307 C308 C309 C310 C311 C312 C313 C314 C325 C326 C337 C338 C339 C340 C341 C342 C343 |
| 1580-2202-016 | -- | CAP,UF, 22, 16V ;ELE 20 | 1.00 | EA | P3 | C301 |
| 1700-3022-300 | C | PC BD,TRANSPONDER DECODER | 1.00 | EA | P6 | P01 |
| 1801-0109-001 | | IND, 1.0 UH, 1 OHM,1025-20 | 1.00 | EA | P3 | L306 |
| 1801-0220-001 | | IND, .22UH, .140HM,1025-04 | 1.00 | EA | P3 | L303 |
| 1801-0479-001 | | IND, 4.7 UH,J,20HM,1025-36 | 3.00 | EA | P3 | L301 L304 L305 |
| 1804-0000-004 | | IND,VAR, 054- 184UH,ORG 426 | 1.00 | EA | P3 | L302 |
| 2106-0002-007 | | TERM,SWR,WECO 2051B-S OR -T | 6.00 | EA | P4 | TP302 TP303 TP304 TP305 TP306 TP307 |
| 2108-0000-008 | | PIN FOR 3-203 EJECTOR N/C | 2.00 | EA | P4 | |

JUN 18 1987

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | 0 457 | 05/14/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | *03 |
| 2200-2010-400 | | CONN,M SMB,PC MTG,STR, .453LG | 1.00 | EA | P2 | TP301 |
| 2363-0011-000 | | XTAL,100.000000MHZ,S S,HC-18/U | 1.00 | EA | P3 | Y301 |
| 3131-0000-009 | | IC,74LS151,1-OF-8 SEL/MPLXR | 1.00 | EA | P2 | X336 |
| 3131-0000-012 | | IC,74LS162A,4-BIT DEC COUNTER | 2.00 | EA | P2 | X304<br>X305 |
| 3131-0000-017 | | IC,74LS221,DUAL MULTIVIBRATOR | 3.00 | EA | P2 | X310<br>X311<br>X339 |
| 3131-0000-024 | | IC,74LS123,DUAL MULTIVIBRATOR | 1.00 | EA | P2 | X309 |
| 3131-0000-033 | | IC,74LS04,HEX INVERTER | 3.00 | EA | P2 | X301<br>X303<br>X335 |
| 3131-0000-037 | | IC,74LS20,DUAL 4-INPUT NAND | 1.00 | EA | P2 | X302 |
| 3131-0000-038 | | IC,74LS74A,DUAL D FLIP-FLOP | 4.00 | EA | P2 | X307<br>X312<br>X314<br>X338 |
| 3131-0000-043 | | IC,74LS377,OCTAL D FLIP-FLOP | 1.00 | EA | P2 | X324 |
| 3131-0000-044 | | IC,74LS00,QUAD 2-INPUT NAND | 3.00 | EA | P2 | X306<br>X308<br>X337 |
| 3131-0000-045 | | IC,74LS138,3-TO-8 DCDR/MPLXR | 1.00 | EA | P2 | X313 |
| 3211-3050-001 | | IC,74LS90,DEC COUNTER(SPECIAL) | 1.00 | EA | P2 | X323 |
| 3211-3164-000 | | IC,74LS164,8-BIT REGISTER | 2.00 | EA | P2 | |



| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | 0 457 | 05/14/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | X319 |
| 3211-3244-000 | | IC,74LS244,OCTAL BUF/DRVR/RCVR | 1.00 | EA | P2 | X325 |
| 3211-3374-000 | | IC,74LS374,OCTAL D FLIP-FLOP | 7.00 | EA | P2 | X326<br>X327<br>X328<br>X329<br>X330<br>X331<br>X332 |
| 3211-3390-000 | | IC,74LS390,DUAL DECADE COUNTER | 3.00 | EA | P2 | X315<br>X316<br>X317<br>X320<br>X321<br>X322<br>X333<br>X334<br>X340 |
| 3213-1001-000 | | IC,10010,BCD DECADE COUNTER | 2.00 | EA | P2 | X341<br>X342 |
| 4104-0000-002 | | CARD GUIDE & EJECTOR S-203 | 2.00 | EA | P3 | A82 |
| 4701-8681-003 | | RES, S, 1/8W, 680 OHM | 4.00 | EA | P4 | R342<br>R343<br>R344<br>R345 |
| 4702-0103-003 | | RES, S, 1/4W, 10K OHM | 3.00 | EA | P4 | R306<br>R314<br>R341 |
| 4702-0121-003 | | RES, S, 1/4W, 120 OHM | 1.00 | EA | P4 | R309 |
| 4702-0123-003 | | RES, S, 1/4W, 12K OHM | 1.00 | EA | P4 | R332 |
| 4702-0151-003 | | RES, S, 1/4W, 150 OHM | 2.00 | EA | P4 | R320 |

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | # 457 | 05/14/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | R322 |
| 4702-0182-003 | | RES, 5, 1/4W, 1.8K OHM | 2.00 | EA | P4 | R311 R312 |
| 4702-0183-003 | | RES, 5, 1/4W, 18K OHM | 1.00 | EA | P4 | R335 |
| 4702-0221-003 | | RES, 5, 1/4W, 220 OHM | 4.00 | EA | P4 | R319 R321 R323 R324 |
| 4702-0222-003 | | RES, 5, 1/4W, 2.2K OHM | 7.00 | EA | P4 | R301 R320 R331 R336 R337 R338 R339 |
| 4702-0271-003 | | RES, 5, 1/4W, 270 OHM | 1.00 | EA | P4 | R308 |
| 4702-0331-003 | | RES, 5, 1/4W, 330 OHM | 1.00 | EA | P4 | R310 |
| 4702-0393-003 | | RES, 5, 1/4W, 39K OHM | 1.00 | EA | P4 | R302 |
| 4702-0471-003 | | RES, 5, 1/4W, 470 OHM | 8.00 | EA | P4 | R304 R305 R315 R316 R317 R318 R325 R326 |
| 4702-0472-003 | | RES, 5, 1/4W, 4.7K OHM | 2.00 | EA | P4 | R329 R340 |
| 4702-0473-003 | | RES, 5, 1/4W, 47K OHM | 1.00 | EA | P4 | R334 |
| 4702-0680-003 | | RES, 5, 1/4W, 68 OHM | 2.00 | EA | P4 | R302 |



| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | # 457 | 05/14/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 4706-3401-001 | | RES, 1, 1/4W, 3.40K OHM | 1.00 | EA | P4 | R307 R333 |
| 4756-3120-200 | | POT, 2K OHM, 3339W-1-202 | 2.00 | EA | P4 | R330 |
| 4803-0000-004 | B | TRANS,MRF911 ,NPN HF AMP SW | 1.00 | EA | P2 | Q312 |
| 4807-0000-001 | | TRANS, 2N3903 ,NPN HS SW | 2.00 | EA | P2 | Q305 Q306 |
| 4807-0000-002 | | TRANS, 2N3905 ,PNP HS SW | 2.00 | EA | P2 | Q303 Q304 |
| 4809-0000-005 | -- | TRANS,66382 ,NPN HF AMP | 1.00 | EA | P2 | Q301 |
| 4815-0000-003 | | DIODE, 1N4148 ,SIGNAL, 75PRV | 1.00 | EA | P2 | CR301 |
| 5130-0010-025 | | SWITCH,DIP,SPST,5 ACT, 2-POS | 1.00 | EA | P4 | SW01 |
| 6011-0018-001 | | TUBING,TF,26 AWG,NATURAL,TW | 20 | FT | F5 | #06 |
| 6011-0027-001 | | TUBING,TF,22 AWG,NATURAL,TW | 1.50 | FT | F5 | #07 |
| 8010-0000-904 | | ALUM EXTR,7 FIN,.19 X .73,6012 | 2.00 | EA | P3 | #04 |
| DWG-0000-3012-301 | A | SCHEM,TRANSPONDER DECODER1400A | 00 | EA | X | |

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STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | B 457 | 05/14/87 |

| STAT | REF.DES. | QTY | COMP. PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | | .00 | DWG-0000-3012-301 | SCHEM,TRANSPONDER DECODER1400A | 87/05/05 | 99/99/99 |
| ACT | *01 | 1.00 | 1706-3022-300 | PC BD,TRANSPONDER DECODER | 00/00/00 | 99/99/99 |
| ACT | *02 | 2.00 | 4104-0000-002 | CARD GUIDE & EJECTOR S-203 | 00/00/00 | 99/99/99 |
| ACT | *03 | 2.00 | 2108-0000-008 | PIN FOR S-203 EJECTOR N/C | 00/00/00 | 99/99/99 |
| ACT | *04 | 2.00 | 8010-0000-904 | ALUM EXTR,7 FIN, 19 X .73,6012 | 00/00/00 | 99/99/99 |
| ACT | *05 | .06 | 1050-0000-075 | WIRE,BUS,TINNED COPPER,26GA | 00/00/00 | 99/99/99 |
| ACT | *06 | .20 | 6011-0018-001 | TUBING,TF,26 AWG,NATURAL,TU | 87/05/14 | 99/99/99 |
| ACT | *07 | 1.50 | 6011-0027-001 | TUBING,TF,22 AWG,NATURAL,TU | 87/05/14 | 99/99/99 |
| ACT | C301 | 1.00 | 1580-2202-016 | CAP,UF, 22, 16V ,ELE 20 | 87/03/05 | 99/99/99 |
| ACT | C302 | 22.00 | 1521-0000-008 | CAP,UF 10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C303 | - -- | 1521-0000-008 | CAP,UF 10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C304 | - -- | 1521-0000-008 | CAP,UF 10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C305 | - -- | 1521-0000-008 | CAP,UF 10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C306 | - -- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C307 | -.-- | 1521-0000-008 | CAP,UF 10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C308 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C309 | -.-- | 1521-0000-008 | CAP,UF 10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C310 | - -- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C311 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C312 | -.-- | 1521-0000-008 | CAP,UF 10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C313 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C314 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C315 | 2.00 | 1501-0103-005 | CAP,UF .010, 50V,DISC 10 | 00/00/00 | 99/99/99 |
| ACT | C316 | 7.00 | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C317 | 1.00 | 1506-0270-017 | CAP,PF 27, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C318 | - -- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |

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STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | B 457 | 05/14/87 |


| STAT | REF DES | QTY | COMP PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | C319 | - -- | 1506-0102-017 | CAP,PF 1000, 100 .NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C320 | 1.00 | 1506-0121-017 | CAP,PF 120, 100V,NPO 5 | 00/00/00 | 99/99/99 |
| ACT | C321 | - -- | 1506-0102-017 | CAP,PF 1000, 100V,NPO 5 | 00/00/00 | 99/99/99 |
| ACT | C322 | - -- | 1506-0102-017 | CAP,PF 1000, 100V,NPO 5 | 00/00/00 | 99/99/99 |
| ACT | C323 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V NPO 5 | 00/00/00 | 99/99/99 |
| ACT | C324 | 4.00 | 1506-0331-017 | CAP,PF 330, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C325 | - -- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C326 | 2.00 | 1506-0330-017 | CAP,PF 33, 100V,NPO 5 | 00/00/00 | 99/99/99 |
| ACT | C327 | -.-- | 1506-0330-017 | CAP,PF 33, 100V,NPO 5 | 00/00/00 | 99/99/99 |
| ACT | C328 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C330 | 1.00 | 1506-0820-017 | CAP,PF 82, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C331 | 2.00 | 1506-0101-017 | CAP,PF, 100, 100V,NPO. 5 | 00/00/00 | 99/99/99 |
| ACT | C332 | - -- | 1506-0101-017 | CAP,PF, 100, 100V,NPO. 5 | 00/00/00 | 99/99/99 |
| ACT | C333 | 1.00 | 1506-0221-017 | CAP,PF 220, 100V,NPO. 5 | 00/00/00 | 99/99/99 |
| ACT | C334 | - -- | 1501-0103-005 | CAP,UF .010, 50V,DISC 10 | 00/00/00 | 99/99/99 |
| ACT | C335 | 1.00 | 1506-0681-017 | CAP,PF 680, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C336 | -.-- | 1506-0331-017 | CAP,PF 330, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C337 | - -- | 1521-0000-008 | CAP,UF 10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C338 | -.-- | 1521-0000-008 | CAP,UF 10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C339 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C340 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C341 | -.-- | 1521-0000-008 | CAP,UF 10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C342 | -.-- | 1521-0000-008 | CAP,UF 10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C343 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C344 | - -- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C345 | 1.00 | 1506-0122-017 | CAP,PF 1200, 100V,NPO, 5 | 00/00/00 | 99/99/99 |

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STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | B 457 | 05/14/87 |

| STAT | REF.DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | C346 | -.-- | 1506-0331-017 | CAP,PF 330, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C347 | -.-- | 1506-0331-017 | CAP,PF 330, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | CR301 | 1.00 | 4815-0000-C03 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | L301 | 3.00 | 1801-0479-001 | IND, 4.7 UH,1.20HM,1025-36 | 00/00/00 | 99/99/99 |
| ACT | L302 | 1.00 | 1804-0000-004 | IND,VAR, .054- 104UH,ORG 426 | 00/00/00 | 99/99/99 |
| ACT | L303 | 1.00 | 1801-0229-001 | IND, 22UH,.140HM,1025-04 | 00/00/00 | 99/99/99 |
| ACT | L304 | -.-- | 1801-0479-001 | IND, 4.7 UH,1 20HM,1025-36 | 00/00/00 | 99/99/99 |
| ACT | L305 | -.-- | 1801-0479-001 | IND, 4.7 UH,1.20HM,1025-36 | 00/00/00 | 99/99/99 |
| ACT | L306 | 1.00 | 1801-0109-001 | IND, 1 0 UH, 1 OHM,1025-20 | 00/00/00 | 99/99/99 |
| ACT | P301 | 1.00 | 0003-0000-000 | ***** FOR REFERENCE ONLY * *** | 87/05/05 | 99/99/99 |
| ACT | Q301 | 1.00 | 4809-0000-005 | TRANS,66382 ,NPN HF AMP | 00/00/00 | 99/99/99 |
| ACT | Q302 | 1.00 | 4803-0000-004 | TRANS,MRF911 ,NPN HF AMP SW | 00/00/00 | 99/99/99 |
| ACT | Q303 | 2.00 | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q304 | -.-- | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q305 | 2.00 | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q306 | -.-- | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | R301 | 7.00 | 4702-0222-003 | RES, S, 1/4W, 2 2K OHM | 00/00/00 | 99/99/99 |
| ACT | R302 | 1.00 | 4702-0393-003 | RES, S, 1/4W, 39K OHM | 00/00/00 | 99/99/99 |
| ACT | R303 | 2.00 | 4702-0680-003 | RES, S, 1/4W, 68 OHM | 00/00/00 | 99/99/99 |
| ACT | R304 | 8.00 | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R305 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R306 | 3.00 | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R307 | -.-- | 4702-0680-003 | RES, S, 1/4W, 68 OHM | 00/00/00 | 99/99/99 |
| ACT | R308 | 1.00 | 4702-0271-003 | RES, S, 1/4W, 270 OHM | 00/00/00 | 99/99/99 |
| ACT | R309 | 1.00 | 4702-0121-003 | RES, S, 1/4W 120 OHM | 00/00/00 | 99/99/99 |
| ACT | R310 | 1.00 | 4702-0331-003 | RES, S, 1/4W, 330 OHM | 00/00/00 | 99/99/99 |

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STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | B 457 | 05/14/87 |

| STAT | REF.DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R311 | 2.00 | 4702-0182-003 | RES, S, 1/4W, 1 8K OHM | 00/00/00 | 99/99/99 |
| ACT | R312 | -.-- | 4702-0182-003 | RES, S, 1/4W, 1 8K OHM | 00/00/00 | 99/99/99 |
| ACT | R314 | -.-- | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R315 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R316 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R317 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R318 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R319 | 4.00 | 4702-0221-003 | RES, S, 1/4W, 220 OHM | 00/00/00 | 99/99/99 |
| ACT | R320 | 2.00 | 4702-0151-003 | RES, S, 1/4W, 150 OHM | 00/00/00 | 99/99/99 |
| ACT | R321 | -.-- | 4702-0221-003 | RES, S, 1/4W, 220 OHM | 00/00/00 | 99/99/99 |
| ACT | R322 | -.-- | 4702-0151-003 | RES, S, 1/4W, 150 OHM | 00/00/00 | 99/99/99 |
| ACT | R323 | -.-- | 4702-0221-003 | RES, S, 1/4W, 220 OHM | 00/00/00 | 99/99/99 |
| ACT | R324 | -.-- | 4702-0221-003 | RES, S, 1/4W, 220 OHM | 00/00/00 | 99/99/99 |
| ACT | R325 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R326 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R327 | 2.00 | 4756-3120-200 | POT, 2K OHM, 3339W-1-202 | 00/00/00 | 99/99/99 |
| ACT | R328 | -.-- | 4702-0222-003 | RES, S, 1/4W, 2 2K OHM | 00/00/00 | 99/99/99 |
| ACT | R329 | 2.00 | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R330 | -.-- | 4756-3120-200 | POT, 2K OHM, 3339W-1-202 | 00/00/00 | 99/99/99 |
| ACT | R331 | -.-- | 4702-0222-003 | RES, S, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R332 | 1.00 | 4702-0123-003 | RES, S, 1/4W, 12K OHM | 00/00/00 | 99/99/99 |
| ACT | R333 | 1.00 | 4706-3401-001 | RES, 1, 1/4W, 3.40K OHM | 00/00/00 | 99/99/99 |
| ACT | R334 | 1.00 | 4702-0473-003 | RES, S, 1/4W, 47K OHM | 87/05/14 | 99/99/99 |
| ACT | R335 | 1.00 | 4702-0183-003 | RES, S, 1/4W, 18K OHM | 00/00/00 | 99/99/99 |
| ACT | R336 | -.-- | 4702-0222-003 | RES, S, 1/4W, 2 2K OHM | 00/00/00 | 99/99/99 |
| ACT | R337 | -.-- | 4702-0222-003 | RES, S, 1/4W, 2 2K OHM | 00/00/00 | 99/99/99 |

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PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 5

STAT ==) ACT = ACTIVE VALUE
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| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | # 457 | 05/14/87 |

| STAT | REF.DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R338 | -.-- | 4702-0222-003 | RES, S, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R339 | -.-- | 4702-0222-003 | RES, S, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R340 | -.-- | 4702-4472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R341 | -.-- | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R342 | 4.00 | 4701-0681-003 | RES, S, 1/8W, 680 OHM | 87/05/14 | 99/99/99 |
| ACT | R343 | -.-- | 4701-0681-003 | RES, S, 1/8W, 680 OHM | 87/05/14 | 99/99/99 |
| ACT | R344 | -.-- | 4701-0681-003 | RES, S, 1/8W, 680 OHM | 87/05/14 | 99/99/99 |
| ACT | R345 | -.-- | 4701-0681-003 | RES, S, 1/8W, 680 OHM | 87/05/14 | 99/99/99 |
| ACT | SW01 | 1.00 | 5130-0010-025 | SWITCH,DIP,SPST,8 ACT, 2-POS | 00/00/00 | 99/99/99 |
| ACT | TP301 | 1.00 | 2200-2010-400 | CONN,M SMB,PC MTG,STR, 453LG | 00/00/00 | 99/99/99 |
| ACT | TP302 | 6.00 | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP303 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP304 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP305 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP306 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP307 | -.-- | 2106-0000-007 | TERM,GND,USECO 9051B-S OR -7 | 00/00/00 | 99/99/99 |
| ACT | X301 | 3.00 | 3131-0000-033 | IC,74LS04,HEX INVERTER | 00/00/00 | 99/99/99 |
| ACT | X302 | 1.00 | 3131-0000-037 | IC,74LS20,DUAL 4-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X303 | -.-- | 3131-0000-033 | IC,74LS04,HEX INVERTER | 00/00/00 | 99/99/99 |
| ACT | X304 | 2.00 | 3131-0000-012 | IC,74LS162A,4-BIT DEC COUNTER | 00/00/00 | 99/99/99 |
| ACT | X305 | -.-- | 3131-0000-012 | IC,74LS162A,4-BIT DEC COUNTER | 00/00/00 | 99/99/99 |
| ACT | X306 | 3.00 | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X307 | 4.00 | 3131-0000-038 | IC,74LS74A,DUAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X308 | -.-- | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X309 | 1.00 | 3131-0000-024 | IC,74LS123,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X310 | 3.00 | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 6

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | # 457 | 05/14/87 |

| STAT | REF DES. | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | X311 | -.-- | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X312 | -.-- | 3131-0000-038 | IC,74LS74A,DUAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X313 | 1.00 | 3131-0000-045 | IC,74LS138,3-TO-8 DCDR/MPLXR | 00/00/00 | 99/99/99 |
| ACT | X314 | -.-- | 3131-0000-038 | IC,74LS74A,DUAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X315 | 9.00 | 3211-3390-000 | IC,74LS390,DUAL DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X316 | -.-- | 3211-3390-000 | IC,74LS390,DUAL DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X317 | -.-- | 3211-3390-000 | IC,74LS390,DUAL DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X318 | 2.00 | 3211-3164-000 | IC,74LS164,8-BIT REGISTER | 00/00/00 | 99/99/99 |
| ACT | X319 | -.-- | 3211-3164-000 | IC,74LS164,8-BIT REGISTER | 00/00/00 | 99/99/99 |
| ACT | X320 | -.-- | 3211-3390-000 | IC,74LS390,DUAL DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X321 | -.-- | 3211-3390-000 | IC,74LS390,DUAL DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X322 | -.-- | 3211-3390-000 | IC,74LS390,DUAL DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X323 | 1.00 | 3211-3090-001 | IC,74LS90,DEC COUNTER(SPECIAL) | 00/00/00 | 99/99/99 |
| ACT | X324 | 1.00 | 3131-0000-042 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X325 | 1.00 | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X326 | 7.00 | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X327 | -.-- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X328 | -.-- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X329 | -.-- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X330 | -.-- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X331 | -.-- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X332 | -.-- | 3211-3374-000 | IC,74LS374,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X333 | -.-- | 3211-3390-000 | IC,74LS390,DUAL DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X334 | -.-- | 3211-3390-000 | IC,74LS390,DUAL DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X335 | -.-- | 3131-0000-033 | IC,74LS04,HEX INVERTER | 00/00/00 | 99/99/99 |
| ACT | X336 | 1.00 | 3131-0000-009 | IC,74LS151,1-OF-8 SEL/MPLXR | 00/00/00 | 99/99/99 |

JUN 18 1987

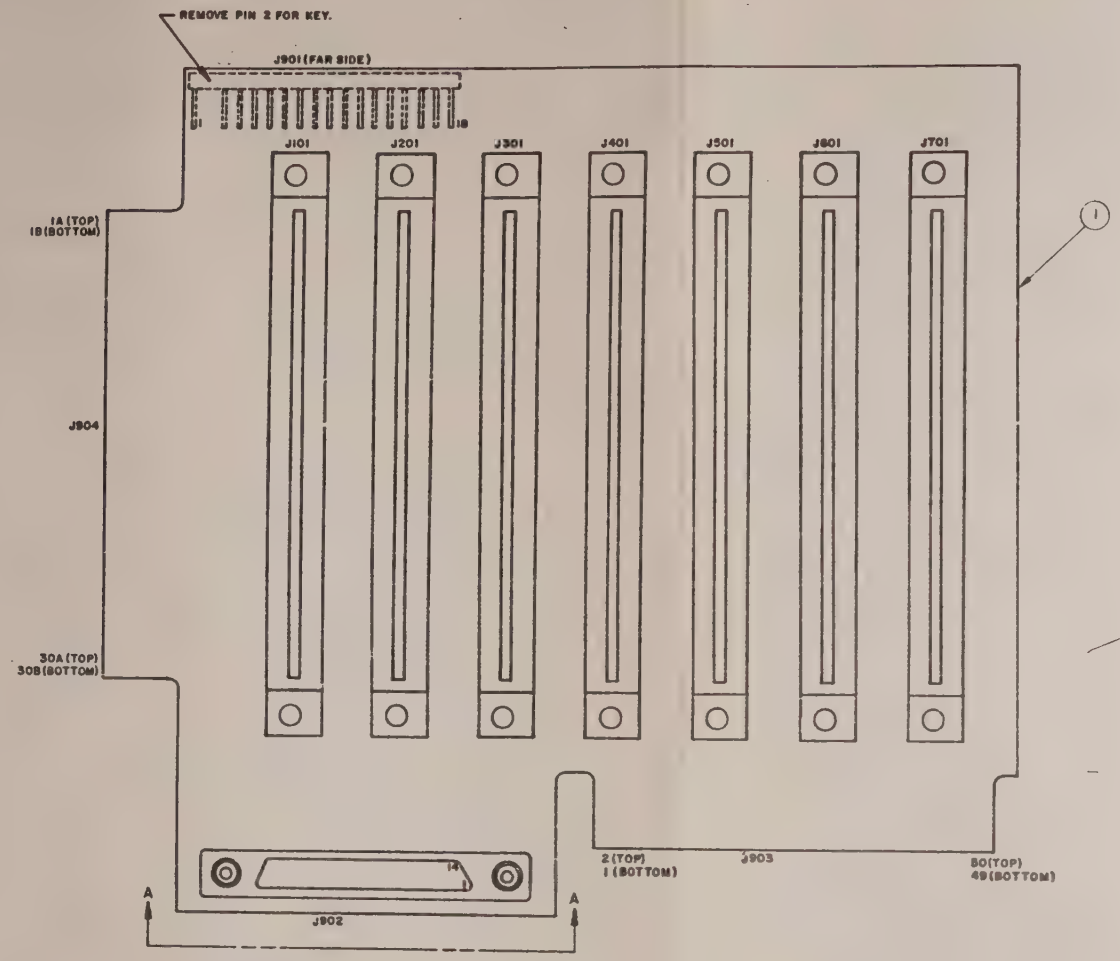
STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-301 | A | PCB ASSY,TRANSPONDER DECODER | 0 457 | 05/14/87 |

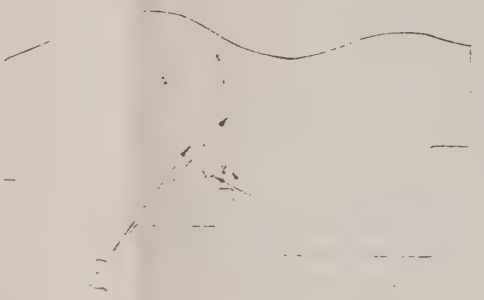
| STAT | REF.DES. | QTY | COMP. PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | X337 | - -- | 3131-0000-044 | IC,74LS00,QUAD 2-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X338 | - -- | 3131-0000-038 | IC,74LS74A,DUAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X339 | - -- | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X340 | - -- | 3211-3390-000 | IC,74LS390,DUAL DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X341 | 2 00 | 3213-1001-000 | IC,10010,BCD DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | X342 | - -- | 3213-1001-000 | IC,10010,BCD DECADE COUNTER | 00/00/00 | 99/99/99 |
| ACT | Y301 | 1 00 | 2363-0011-000 | XTAL,100.000000MHZ,S S,HC-18/U | 00/00/00 | 99/99/99 |

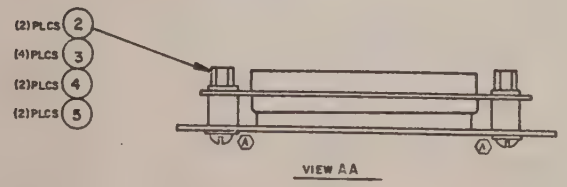
JUN 18 1987

| DATE | REV | CHANGE |
|---|---|---|
| 6/16/87 | A | OFFICIAL RELEASE #1225 |




NOTES:
1. REFERENCE CIRCUIT SCHEMATIC 0000-3012-801





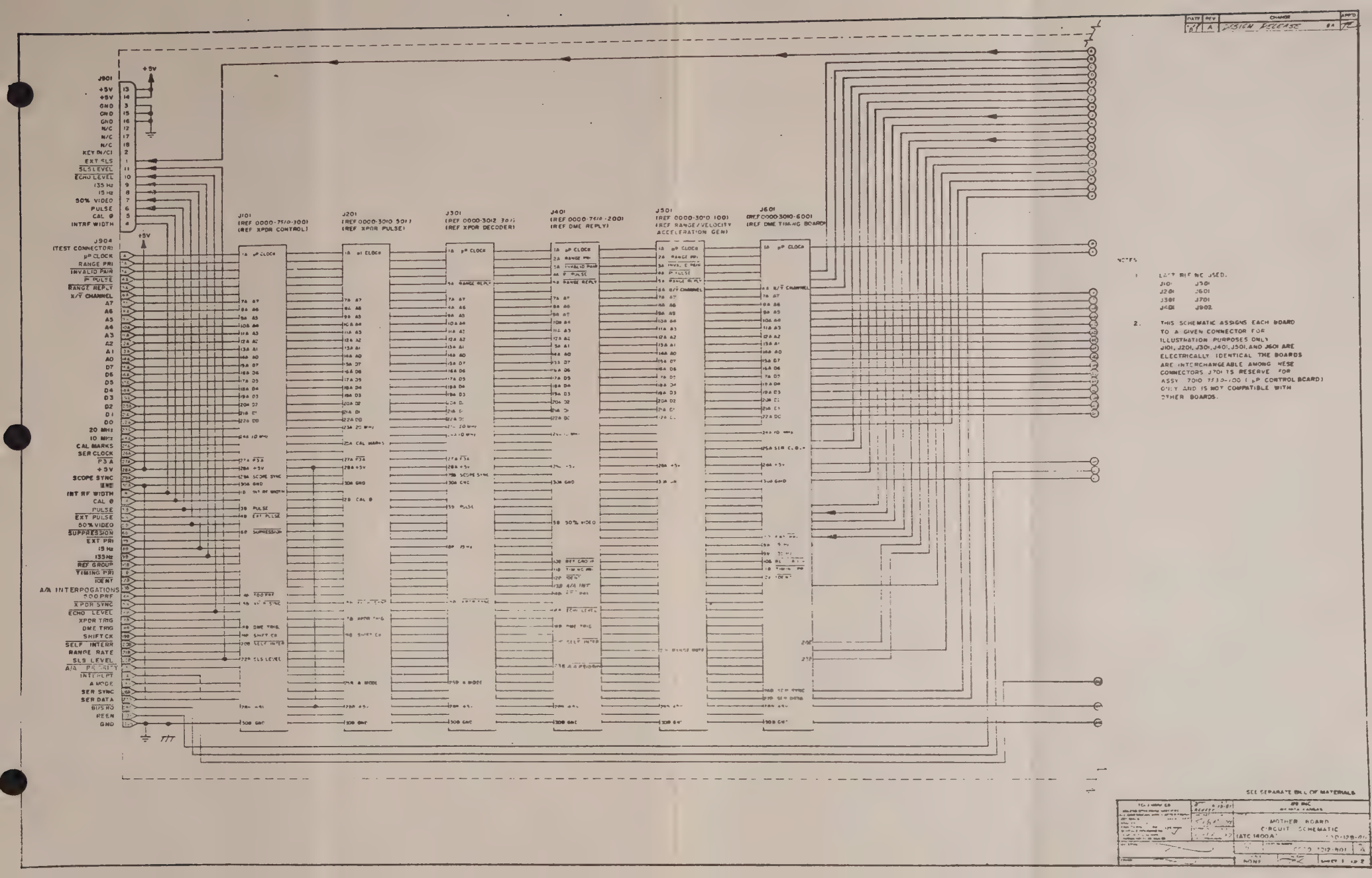

VIEW AA

7010-3032-801 SCHEMATIC SHOWN

JUN 18 1987

SEE SEPARATE BILL OF MATERIALS

| | | |
|---|---|---|
| TOLERANCES UNLESS OTHERWISE SPECIFIED | | - SFR INC - WICHITA KANSAS |
| | | TITLE: P.C. BOARD ASS'Y - MOTHERBOARD |
| | | SIZE: C; PART NUMBER: 7010-3032-8; REV: A |
| | | SCALE: 2:1; WEIGHT: ; SHEET 1 OF 1 |




| DATE | REV | CHANGE | APPD |
|---|---|---|---|
| 8/1 | A | DESIGN RELEASE | BA |

NOTES

1. LAST REF DES USED.
   J101 J501
   J201 J601
   J301 J701
   J401 J802

2. THIS SCHEMATIC ASSIGNS EACH BOARD TO A GIVEN CONNECTOR FOR ILLUSTRATION PURPOSES ONLY. J101, J201, J301, J401, J501, AND J601 ARE ELECTRICALLY IDENTICAL THE BOARDS ARE INTERCHANGEABLE AMONG HESE CONNECTORS J701 IS RESERVE FOR ASSY 7010 7532-100 ( μP CONTROL BOARD) ONLY AND IS NOT COMPATIBLE WITH OTHER BOARDS.

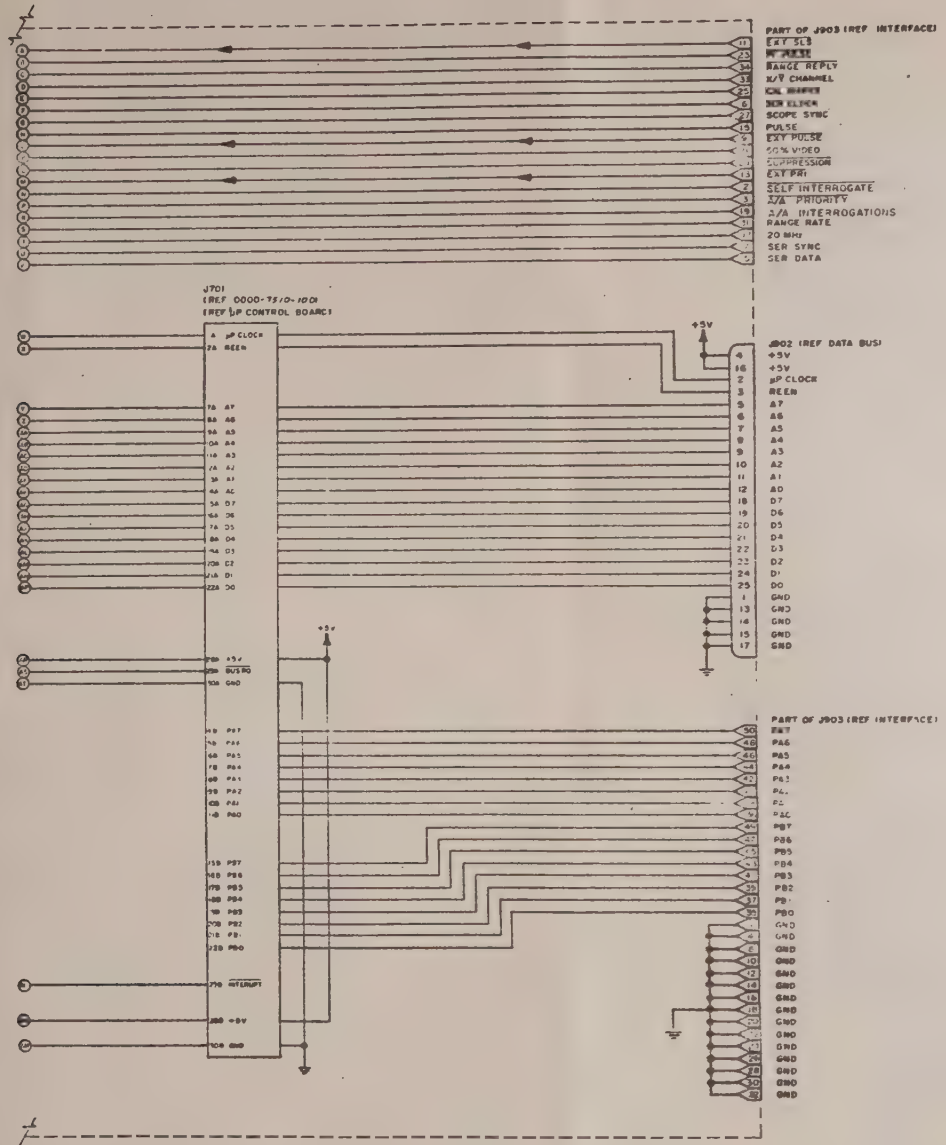
SEE SEPARATE BILL OF MATERIALS

MOTHER BOARD
CIRCUIT SCHEMATIC
(ATC 1400A)

7010-7212-901 A

SHEET 1 OF 2

| DATE | REV | CHANGE | APP'D |
|---|---|---|---|
| 6-17-97 | A | SEE SHEET 1 | BA |




SEE SEPARATE BILL OF MATERIALS

| | | |
|---|---|---|
| TOLERANCES | | - SYE INC. - |
| | | MOTHER BOARD CIRCUIT SCHEMATIC (ATC MODE A) (20-28-01) |
| | | SIZE D; FSCM NO. 0000-3002-001; REV A |
| | | SCALE NONE; SHEET 2 OF 2 |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3032-801 | A | PCB ASSY,MOTHERBOARD | | 01/22/85 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 1050-0000-075 | | WIRE,BUS,TINNED COPPER,26GA | 50 | FT | F5 | /\/\/\/\/\ *06 |
| 1700-3022-800 | A | PC BD,MOTHER BOARD | 1.00 | EA | P6 | /\/\/\/\/\ *01 |
| 2115-0000-021 | | CONN MOLEX 22-05-2101 | 1.00 | EA | P2 | /\/\/\/\/\ J901 |
| 2116-0000-018 | | CONN,D-SUB,M,25-P,PCM,STR,.125 | 1.00 | EA | P2 | /\/\/\/\/\ J902 |
| 2226-4023-000 | | CONN,CARD, 100C,DR,FS, 30-POS | 7.00 | EA | P2 | /\/\/\/\/\ J101 J201 J301 J401 J501 J601 J701 |
| 2800-7600-141 | UU | SPACER,AL,.25 OD,4-40ID, 440LG | 2.00 | EA | S7 | /\/\/\/\/\ *04 |
| 2803-0250-006 | | SCREW,4-40 X 1/4 PPHM | 2.00 | EA | F4 | /\/\/\/\/\ *05 |
| 2840-0000-003 | | WASHER,LOCK,INT TOOTH,4 | 4.00 | EA | F4 | /\/\/\/\/\ *03 |
| 2850-7601-301 | K | SCREW, 188L4-40 19HH,4-40X 300 | 2.00 | EA | F4 | /\/\/\/\/\ *02 |
| 6011-0018-001 | | TUBING,TF,26 AWG,NATURAL,TU | 50 | FT | F5 | /\/\/\/\/\ *07 |

JUN 19 1987

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY TOP DESIG. , PAGE 1

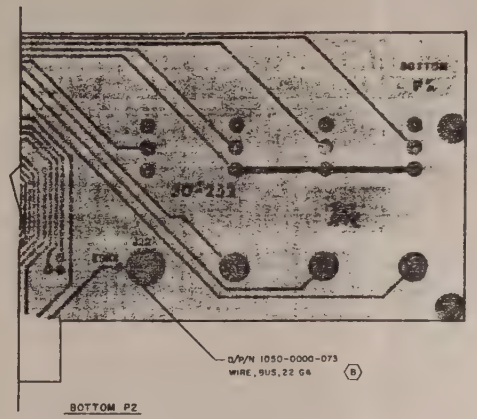
STAT ##, ACT = ACTIVE VALUE
### PND = PENDING VALUE
### DEF = OBSOLETE LISTING

ASSY NO. 7010-3032-801 | REVISION A | DESCRIPTION PCB ASSY,MOTHERBOARD | LAST ECN | DATE INC 01/22/85

| STAT | REF DES. | QTY | COMP PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | *01 | 1.00 | 1706-3022-000 | PC BD,MOTHER BOARD | 00/00/00 | 99/99/99 |
| ACT | *02 | 2.00 | 2353-7601-301 | SCREW, 188L4-40 19MM,4-40X 300 | 00/00/00 | 99/99/99 |
| ACT | *03 | 4.00 | 2340-2000-003 | WASHER,LOCK,INT TOOTH,4 | 00/00/00 | 99/99/99 |
| ACT | *04 | 2.00 | 2206-7600-141 | SPACER,AL, 25 OD,4-40ID, 440LG | 00/00/00 | 99/99/99 |
| ACT | *05 | 2.00 | 2303-0250-006 | SCREW,4-40 X 1/4 PPHM | 00/00/00 | 99/99/99 |
| ACT | *06 | .00 | 1050-0000-075 | WIRE,BUS,TINNED COPPER,26GA | 87/04/22 | 99/99/99 |
| ACT | *07 | 50 | 5011-0018-001 | TUBING,TF,26 AWG,NATURAL,TU | 87/04/22 | 99/99/99 |
| ACT | J101 | 7.00 | 2226-4023-000 | CONN,CARD 100C,DR,FS, 30-POS | 00/00/00 | 99/99/99 |
| ACT | J201 | - --- | 2226-4023-000 | CONN,CARD, 100C,DR,FS, 30-POS | 00/00/00 | 99/99/99 |
| ACT | J301 | - --- | 2226-4023-000 | CONN,CARD, 100C,DR,FS, 30-POS | 00/00/00 | 99/99/99 |
| ACT | J401 | - --- | 2226-4023-000 | CONN,CARD, 100C,DR,FS, 30-POS | 00/00/00 | 99/99/99 |
| ACT | J501 | -.-- | 2226-4023-000 | CONN,CARD, 100C,DR,FS, 30-POS | 00/00/00 | 99/99/99 |
| ACT | J601 | -.-- | 2226-4023-000 | CONN,CARD, 100C,DR,FS, 30-POS | 00/00/00 | 99/99/99 |
| ACT | J701 | -.-- | 2226-4023-000 | CONN,CARD, 100C,DR,FS, 30-POS | 00/00/00 | 99/99/99 |
| ACT | J901 | 1.00 | 2115-0000-021 | CONN MOLEX 22-05-2181 | 00/00/00 | 99/99/99 |
| ACT | J902 | 1.00 | 2116-0000-018 | CONN,D-SUB,M,25-P,PCM,STR, 125 | 00/00/00 | 99/99/99 |

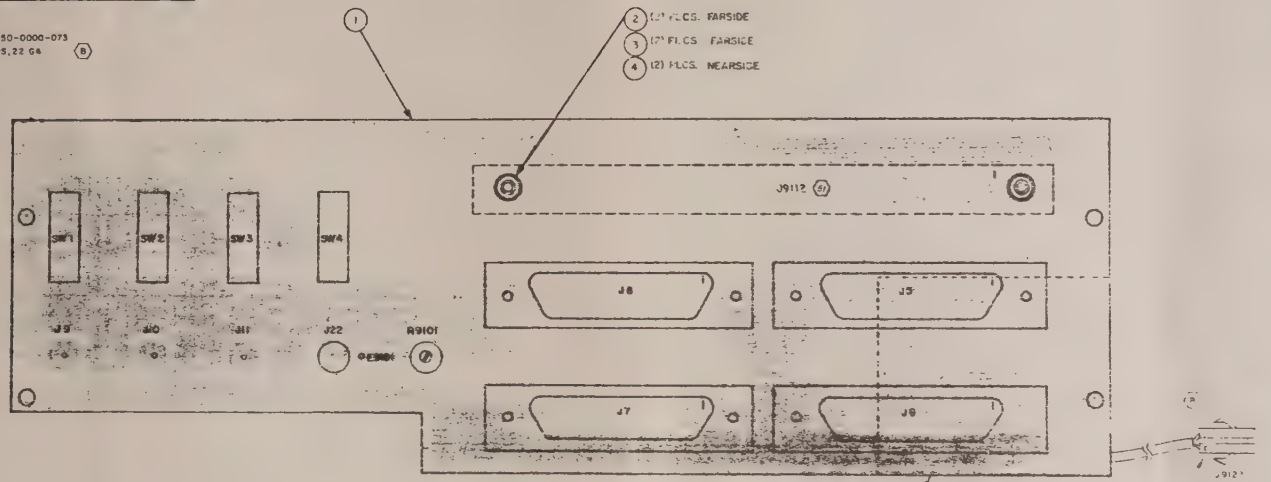
JUN 18 1987

| DATE | REV. | CHANGE | APPD |
|---|---|---|---|
| 6-15-87 | P2-B | INTERIM RELEASE | |
| 7-27-87 | P2-C | ECN #3509 PROD RELEASE | |
| | A | | |
| 7-30-87 | B | INC ECN 6180 | |
| | | | |




BOTTOM P2

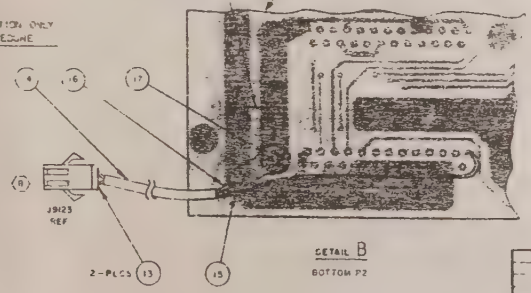
DETAIL A




7010-3035-20C (-30-35-C) SHOWN

(B) P/N 1050-0000-073
WIRE, BUS, 22 GA.

THIS DWG FOR COMPONENT LOCATION ONLY
SEE SHT 2 OF 2 FOR ASSY PROCEDURE




DETAIL B
BOTTOM P2

NOTES

1. J9109 MOUNTED ON BOTTOM SIDE OF BOARD
2. ALL REFERENCE NO'S. ARE 9100- SERIES PREFIX (I.E. R1 IS R9101).
3. REFERENCE CIRCUIT SCHEMATIC 0000-3015-200.

(A) HARDWARE SUPPLIED WITH SW1 2 3 4 AND CONNECTORS J1 THRU J4, J9 THRU J22

(B) TIGHTEN NUT ON SW1, 2, 3, & 4 BEFORE INSTALLING IN PANEL ITEM 10. DO NOT TIGHTEN NUT ON NEAR SIDE OF PANEL UNTIL SWITCH IS SOLDERED TO PC BD.

JUN 18 1987

WIRE LIST

| FROM | | TO | | WIRE | | | |
|---|---|---|---|---|---|---|---|
| TERMINAL | NOTES | TERMINAL | NOTES | COLOR | AWG | LG | NOTES |
| J9123-1 | F | J6-25 | | WHT/GRY | 26 | 4.0 | |
| J9123-2 | F | J9101 | | BLK | 22 | 2.5 | |

(A)

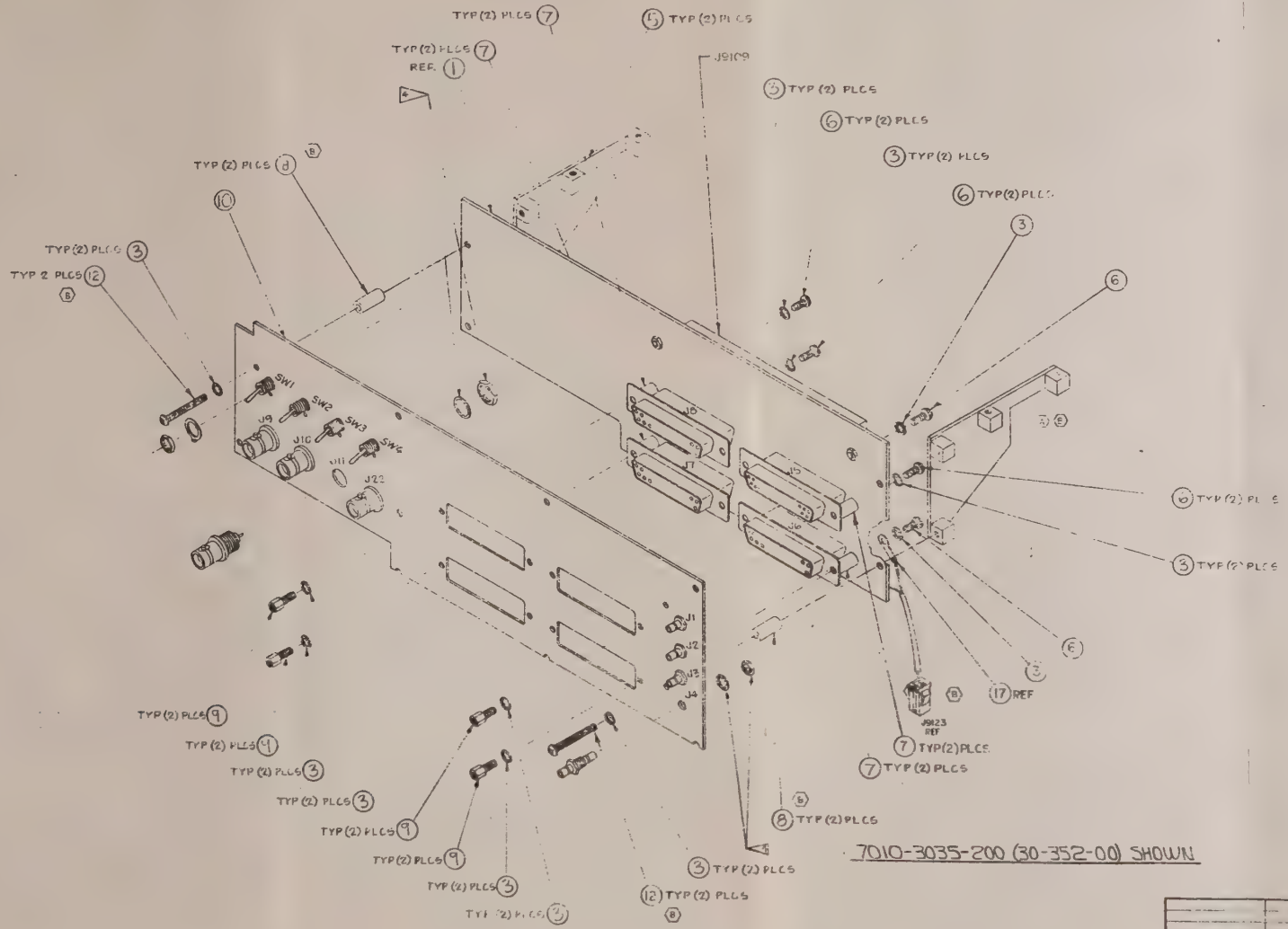
SEE SEPARATE BILL OF MATERIALS

| | | | |
|---|---|---|---|
| 7005-3047-101 | ATC-1400 | | |
| 7005-3047-500 | ATC-1400 | | |
| HEAT ASSY | WORKS | | |

SIZE D | 7010-3035-20XX | REV B

SHEET 1 OF 2

| DATE | REV | CHANGE |
|---|---|---|
| 4-17-87 | 12-1 | INTERIM RELEASE |
| | | SEE SHT 1 OF 2 |




7010-3035-200 (30-352-00) SHOWN

JUN 18 1987

SEE SEPARATE B/M

| | | | |
|---|---|---|---|
| 7005-3047-501 | ATE-1400 | | |
| 7005-3047-500 | ATE-1400 | | |
| NEXT ASSY | MODEL | | |
| APPLICATION | | | |

TOLERANCES

MFG 12-P.P.

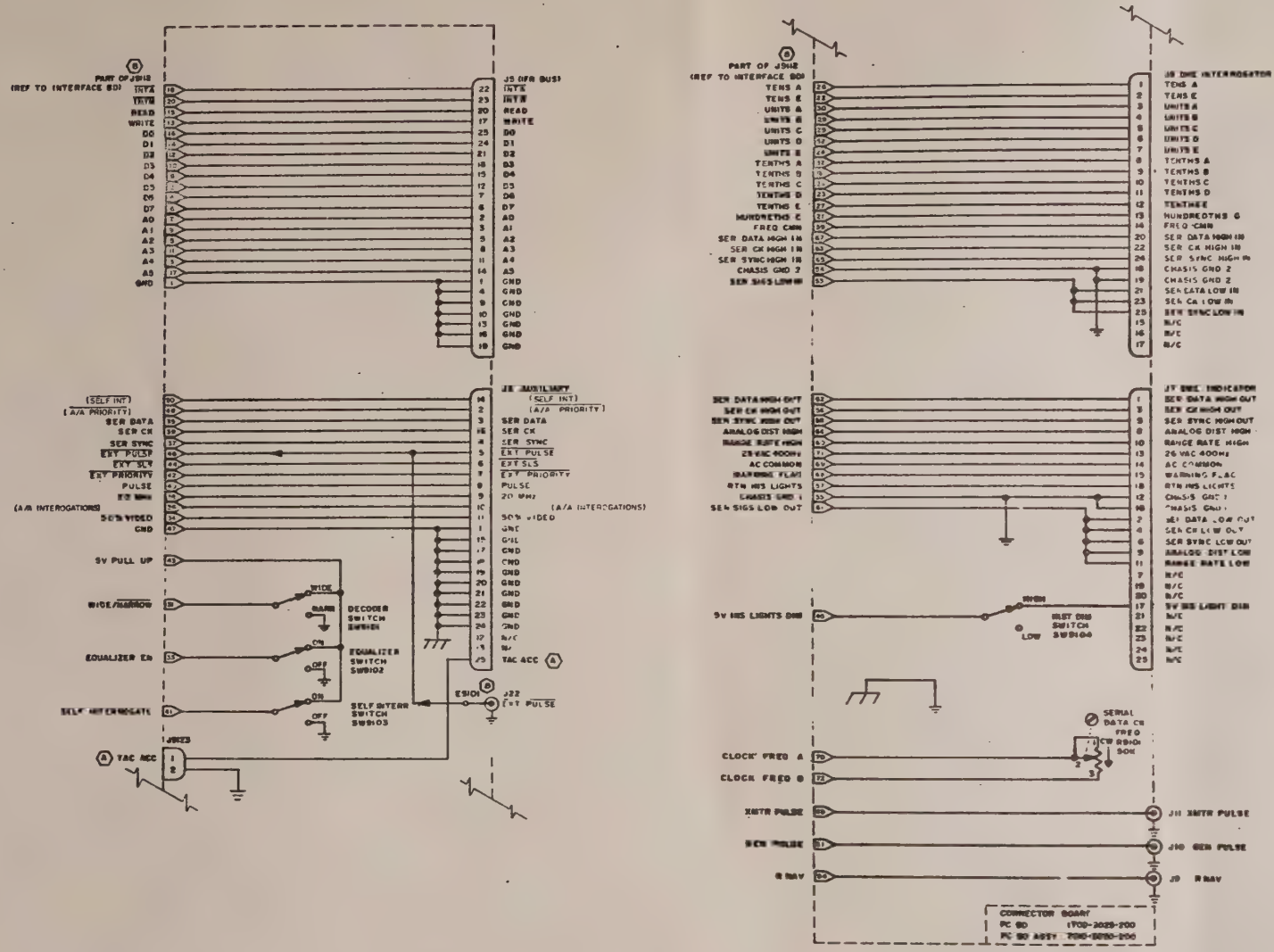
- UTE INC -
WICHITA, KANSAS

MC 68 [illegible]
CONNECTOR
A-30-352

SIZE D | 7010-30 15-2XX | REV 0

SCALE — | SHEET 2 of 2

| DATE | REV | CHANGE | APP'D |
|---|---|---|---|
| 8/27/69 | A | DESIGN RELEASE | |




NOTES

1. LAST REF NO USED:
   - J3B1S
   - J3B2
   - J3B3
   - J3B4
   - SW104
2. REF 0000-3013-300 INTERFACE BD CIRCUIT SCHEMATIC
3. REF 0000-3013-301 INTERFACE BD CIRCUIT SCHEMATIC ATC-1410A

| | | | |
|---|---|---|---|
| TOLERANCES | | DME | |
| | | CONNECTOR BD CIRCUIT SCHEMATIC | |
| | | ATC-1400A | 30-1127-01 |
| | | D | 0000-3013-201 A |
| | | SCALE NONE | SHEET 1 OF 1 |

PRINT DATE 87/06/20 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 1

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-200 | B1 | PCB ASSY,CONNECTOR | 9026 | 09/16/86 |

| STAT | REF DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | *01 | 1.00 | 1700-3025-200 | PC BD,CONNECTOR | 00/00/00 | 99/99/99 |
| ACT | *02 | 2.00 | 2803-0625-006 | SCREW,4-40 X 5/8 PPHM | 00/00/00 | 99/99/99 |
| ACT | *03 | 22.00 | 2840-0000-003 | WASHER,LOCK,INT TOOTH,4 | 00/00/00 | 99/99/99 |
| ACT | *04 | 2.00 | 2850-0000-008 | NUT,HEX,REG PAT,4-40 | 00/00/00 | 99/99/99 |
| ACT | *05 | 2.00 | 1400-3068-501 | BRACKET,INTERFACE PCB SUPPORT | 00/00/00 | 99/99/99 |
| ACT | *06 | 8.00 | 2803-0250-006 | SCREW,4-40 X 1/4 PPHM | 00/00/00 | 99/99/99 |
| ACT | *07 | 8.00 | 2800-7600-141 | SPACER,AL,.25 OD,4-40ID, .440LG | 00/00/00 | 99/99/99 |
| ACT | *08 | 4.00 | 2800-7600-193 | SPACER,AL,1/4 OD, 12SID, 47 LG | 00/00/00 | 99/99/99 |
| ACT | *09 | 8.00 | 2850-7601-301 | SCREW, 188L4-40 19MM,4-40X 300 | 00/00/00 | 99/99/99 |
| ACT | *10 | 1.00 | 1405-3056-601 | PANEL,INTERFACE,FINISHED | 00/00/00 | 99/99/99 |
| ACT | *12 | 4.00 | 2803-0875-006 | SCREW 4-40X7/8 PHIL BIND HD | 00/00/00 | 99/99/99 |
| ACT | *13 | 2.00 | 2114-9003-001 | CONTACT SKT.26-22GA,SHF001T0SS | 00/00/00 | 99/99/99 |
| ACT | *14 | .20 | 6012-0095-100 | TUBING,PVC-105,12 AWG,CLEAR | 00/00/00 | 99/99/99 |
| ACT | *15 | .30 | 6003-0000-019 | WIRE,HOOK,TFE,26GA, 7S WHT/GRY | 00/00/00 | 99/99/99 |
| ACT | *16 | .30 | 6002-0000-001 | WIRE,HOOK,TFE,22GA, 7S,BLACK | 00/00/00 | 99/99/99 |
| ACT | 17 | 1.00 | 2850-0000-014 | LUG,GND,4 | 00/00/00 | 99/99/99 |
| ACT | J9101 | 4.00 | 2123-0000-016 | CONN,ADAPT,M2M SMB,STR BULKHD | 00/00/00 | 99/99/99 |
| ACT | J9102 | -.-- | 2123-0000-016 | CONN,ADAPT,M2M SMB,STR BULKHD | 00/00/00 | 99/99/99 |
| ACT | J9103 | -.-- | 2123-0000-016 | CONN,ADAPT,M2M SMB,STR BULKHD | 00/00/00 | 99/99/99 |
| ACT | J9104 | -.-- | 2123-0000-016 | CONN,ADAPT,M2M SMB STR BULKHD | 00/00/00 | 99/99/99 |
| ACT | J9105 | 8.00 | 2116-0000-019 | CONN,D-SUB,F,25-P,PCM,STR, 188 | 00/00/00 | 99/99/99 |
| ACT | J9106 | -.-- | 2116-0000-019 | CONN,D-SUB,F,25-P,PCM,STR, 188 | 00/00/00 | 99/99/99 |
| ACT | J9107 | -.-- | 2116-0000-019 | CONN,D-SUB,F,25-P,PCM,STR, 188 | 00/00/00 | 99/99/99 |
| ACT | J9108 | -.-- | 2116-0000-019 | CONN,D-SUB,F,25-P,PCM,STR, 188 | 00/00/00 | 99/99/99 |
| ACT | J9109 | 4.00 | 2113-0000-018 | CONN UG1094A/U | 00/00/00 | 99/99/99 |
| ACT | J9110 | -.-- | 2113-0000-018 | CONN UG1094A/U | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/20 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 2

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-200 | B1 | PCB ASSY,CONNECTOR | 9026 | 09/16/86 |

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | J9111 | -.-- | 2113-0000-018 | CONN UG1094A/U | 00/00/00 | 99/99/99 |
| ACT | J9112 | 1.00 | 2226-4023-600 | CONN,CARD, 100C,DR,FS 3e-POS | 00/00/00 | 99/99/99 |
| ACT | J9113 | 9.00 | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | J9114 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | J9115 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | J9116 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | J9117 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | J9118 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | J9119 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | J9120 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | J9121 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | J9122 | -.-- | 2113-0000-018 | CONN UG1094A/U | 00/00/00 | 99/99/99 |
| ACT | J9123 | 1.00 | 2115-9002-002 | CONN,RECT.038 PLUG 2-P,SMP02VB | 00/00/00 | 99/99/99 |
| ACT | R9101 | 1.00 | 4756-3050-300 | POT, 50K OHM, 3339H-1-503 | 00/00/00 | 99/99/99 |
| ACT | SW9101 | 4.00 | 5120-0012-000 | SWITCH,TOG,SPDT,ON-NONE-ON | 00/00/00 | 99/99/99 |
| ACT | SW9102 | -.-- | 5120-0012-000 | SWITCH,TOG,SPDT,ON-NONE-ON | 00/00/00 | 99/99/99 |
| ACT | SW9103 | -.-- | 5120-0012-000 | SWITCH,TOG,SPDT,ON-NONE-ON | 00/00/00 | 99/99/99 |
| ACT | SW9104 | -.-- | 5120-0012-000 | SWITCH,TOG,SPDT,ON-NONE-ON | 00/00/00 | 99/99/99 |

JUN 18 1987

PRINT DATE 87/06/20 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-200 | B1 | PCB ASSY,CONNECTOR | 9026 | 09/16/86 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 0002-0000-000 | | *** REF DESIG NOT USED *** | 9.00 | EA | P | J9113 J9114 J9115 J9116 J9117 J9118 J9119 J9120 J9121 |
| 1400-3068-501 | | BRACKET,INTERFACE PCB SUPPORT | 2.00 | EA | ST | *05 |
| 1405-3056-601 | | PANEL,INTERFACE,FINISHED | 1.00 | EA | S3 | *10 |
| 1700-3025-200 | A | PC BD,CONNECTOR | 1.00 | EA | P6 | *01 |
| 2113-0000-018 | | CONN UC1094A/U | 4.00 | EA | P2 | J9109 J9110 J9111 J9122 |
| 2114-9002-001 | | CONTACT SKT,26-22GA,SHF001T8SS | 2.00 | EA | P2 | *13 |
| 2115-9002-002 | | CONN,RECT.098 PLUG 2-P,SHF02VB | 1.00 | EA | P2 | J9123 |
| 2116-0000-019 | | CONN,D-SUB,F,25-P,PCM,STR,.188 | 4.00 | EA | P2 | J9105 J9106 J9107 J9108 |
| 2123-0000-016 | | CONN,ADAPT,M2M SMB,STR BULKHD | 4.00 | EA | P2 | J9101 J9102 J9103 J9104 |
| 2226-4023-600 | | CONN,CARD, 100C DR,FS, 36-POS | 1.00 | EA | P2 | J9112 |
| 2800-7600-141 | UU | SPACER,AL,.25 OD,4-40ID,.440LG | 8.00 | EA | ST | *07 |
| 2800-7600-153 | UU | SPACER,AL,1/4 OD, 125ID, 47 LG | 4.00 | EA | ST | *08 |

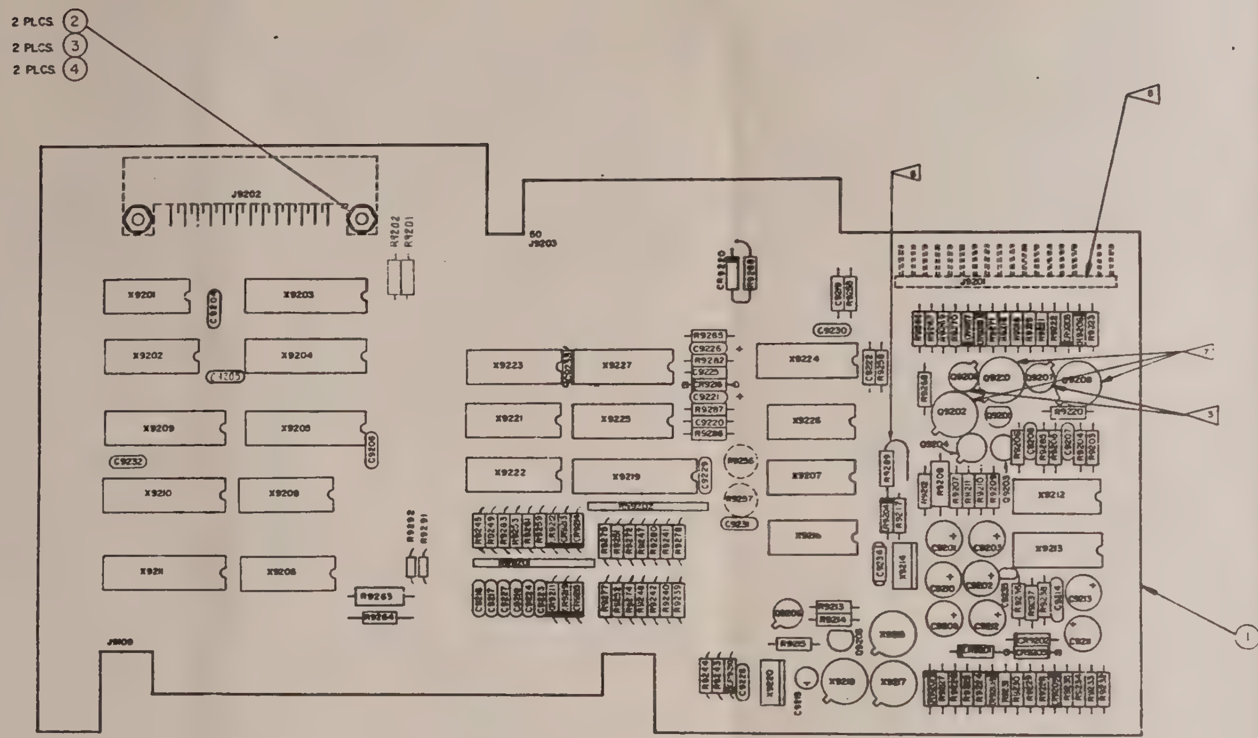
PRINT DATE 87/06/20 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 2

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-200 | B1 | PCB ASSY,CONNECTOR | 9026 | 09/16/86 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 2803-0250-006 | | SCREW,4-40 X 1/4 PPHM | 8.00 | EA | F4 | *06 |
| 2803-0625-006 | | SCREW,4-40 X 5/8 PPHM | 2.00 | EA | F4 | *02 |
| 2803-0875-006 | | SCREW 4-40X7/8 PHIL BIND HD | 4.00 | EA | F4 | *12 |
| 2849-0000-003 | | WASHER,LOCK,INT TOOTH,4 | 22.00 | EA | F4 | *03 |
| 2850-0000-003 | | NUT,HEX,REG FAT,4-40 | 2.00 | EA | F4 | *04 |
| 2850-0000-014 | | LUG,GND,4 | 1.00 | EA | F4 | *11 |
| 2850-7601-301 | K | SCREW, 188L4-40 THHM,4-40X 300 | 8.00 | EA | F4 | *09 |
| 4756-3050-300 | | POT, 50K OHM, 3339M-1-503 | 1.00 | EA | P4 | R9101 |
| 5120-0012-000 | | SWITCH,TOG,SPDT,ON-NONE-ON | 4.00 | EA | P4 | SW9101 SW9102 SW9103 SW9104 |
| 6002-0000-001 | | WIRE,HOOK,TFE,22GA, TS,BLACK | 30 | FT | F5 | *14 |
| 6003-0000-019 | | WIRE,HOOK,TFE,26GA, TS,WHT/GRY | 30 | FT | F5 | *15 |
| 6012-0085-100 | | TUBING,PVC-105,12 AWG,CLEAR | 20 | FT | F5 | *13 |

JUN 18 1987

| DATE | REV | CHANGE | APP'D |
| --- | --- | --- | --- |
| [illegible] | A | DESIGN RELEASE [illegible] 1222 | [illegible] |




7010-3035-301 SHOWN

NOTES

1. REFERENCE CIRCUIT SCHEMATIC 0000-3016-301
2. J9201, J9202, R9256 & R9257 ARE MOUNTED ON BOTTOM SIDE OF BOARD.
3. PUT SHRINK SLEEVING AROUND CASES OF Q9207 AND Q9209 (DO NOT LET CASES TOUCH)
4. R9256 AND R9257 ARE LOCATED ON BACK SIDE OF P.C. BOARD.
5. REMOVE PIN #16 FOR KEY
6. INSTALL [illegible] ON IT'S SIDE WITH A .12 .05 SPACE BETWEEN RESISTOR AND BOARD
7. RESTRICT THE HEIGHT OF TRANSISTORS Q2, Q8, & Q10 TO LESS THAN .325" FROM THE P.C. BD SURFACE

JUN 13 1997

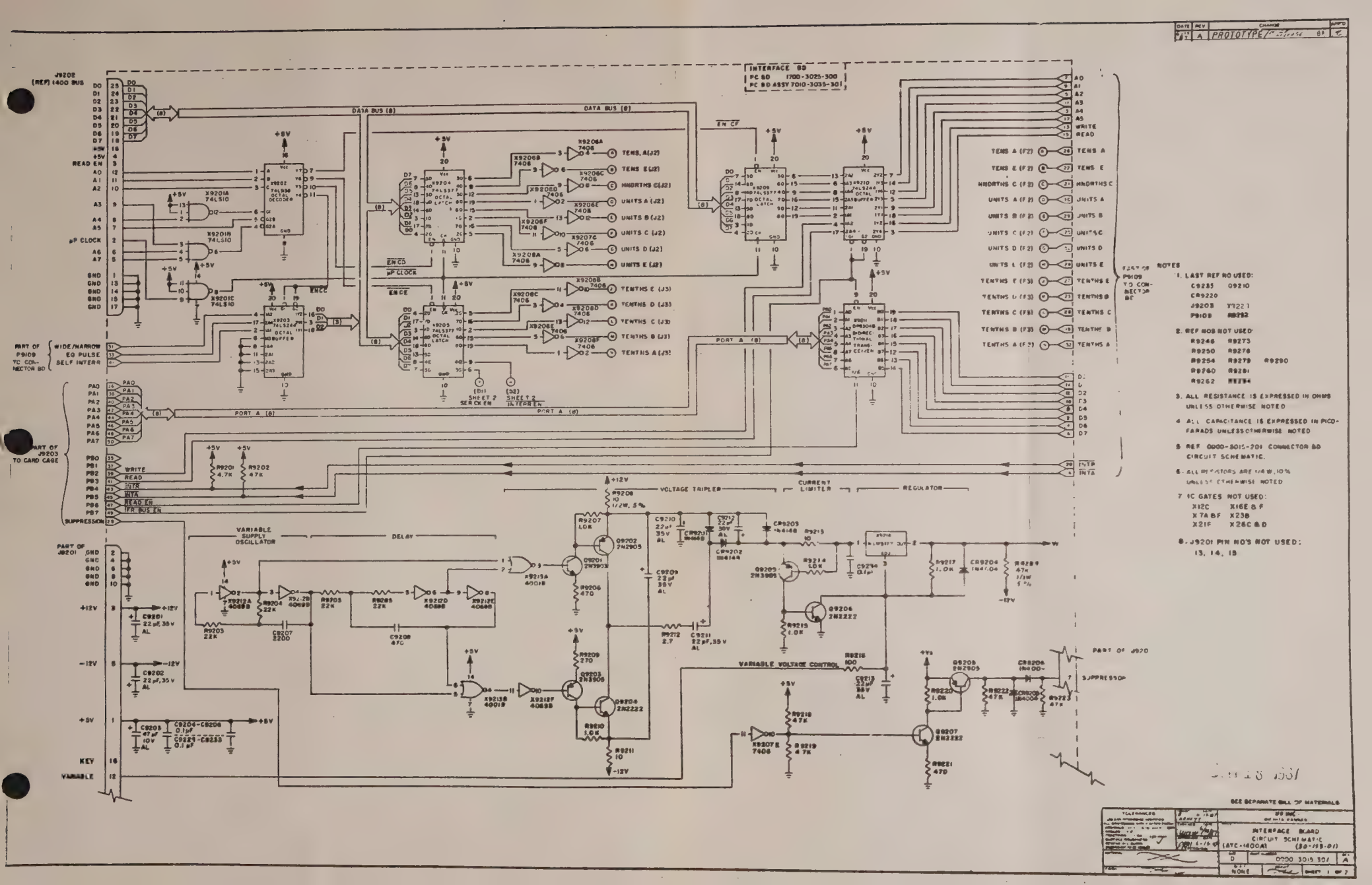
SEE SEPARATE BILL OF MATERIALS

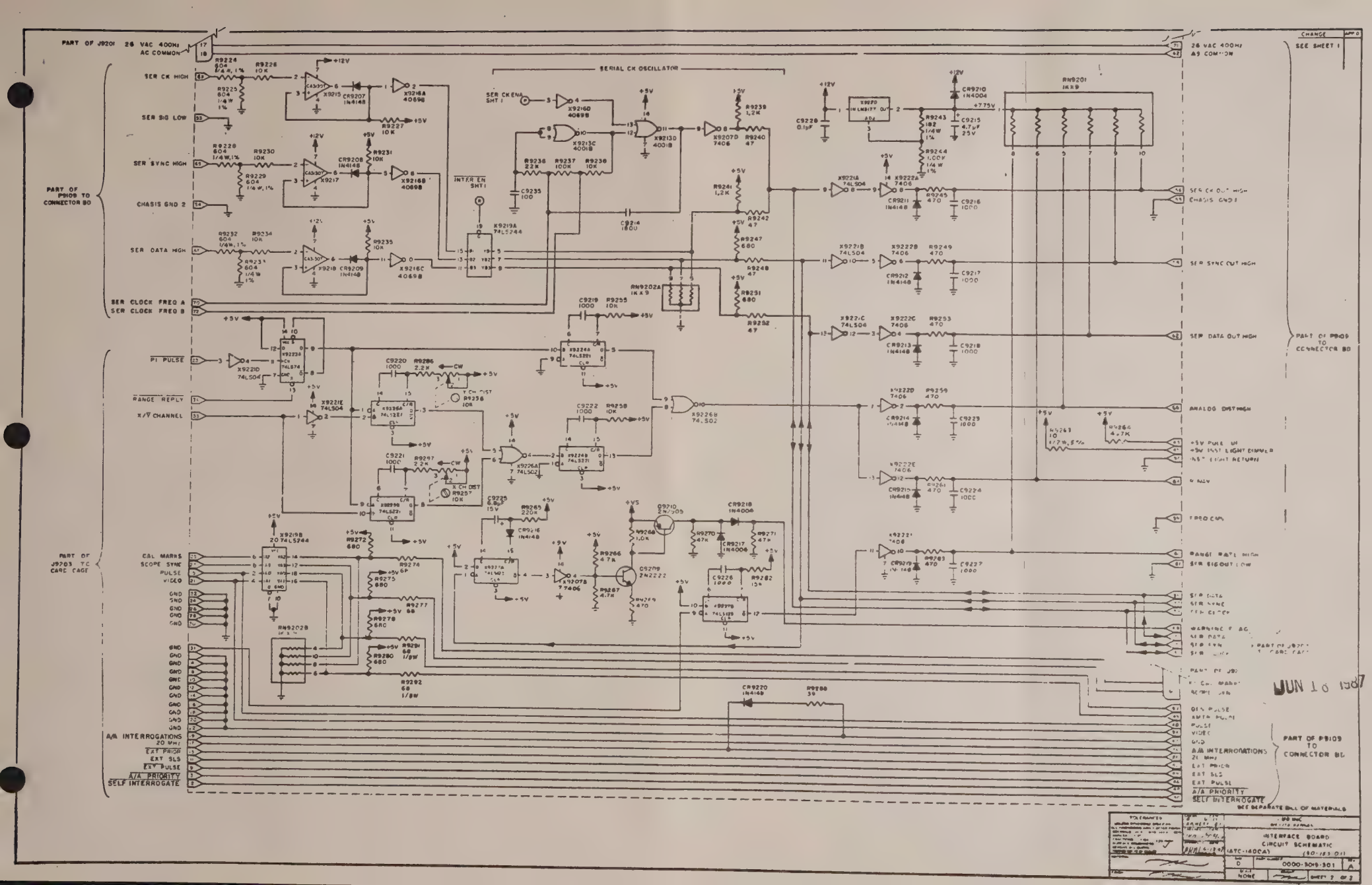
PC BD ASSY- INTERFACE

ATC 14 30A 30-353-01

7010-3035-401

SHEET 1 OF 1


INTERFACE BD
PC BD 1700-3025-300
PC BD ASSY 7010-3035-301
J9202 (REF) 1400 BUS
DATA BUS (8)
PART OF P9109 TO CONNECTOR BD
WIDE/NARROW
EQ PULSE
SELF INTERR
PART OF J9203 TO CARD CAGE
WRITE
READ
INTR
INTA
READ EN
IFR BUS EN
SUPPRESSION
PART OF J9201
KEY
VARIABLE
VOLTAGE TRIPLER
CURRENT LIMITER
REGULATOR
VARIABLE SUPPLY OSCILLATOR
DELAY
VARIABLE VOLTAGE CONTROL
PART OF J9201
SUPPRESSOR
TENS A (F2)
TENS E (F2)
HNDRTHS C (F2)
UNITS A (F2)
UNITS B (F2)
UNITS C (F2)
UNITS D (F2)
UNITS E (F2)
TENTHS E (F3)
TENTHS D (F3)
TENTHS C (F3)
TENTHS B (F3)
TENTHS A (F3)
PART OF P9109 TO CONNECTOR BD
NOTES
1. LAST REF NO USED:
C9235 C9210
CR9220
J9203 XY221
P9108 R9232
2. REF NOS NOT USED:
R9246 R9273
R9250 R9278
R9254 R9279 R9280
R9260 R9281
R9262 R9284
3. ALL RESISTANCE IS EXPRESSED IN OHMS UNLESS OTHERWISE NOTED
4. ALL CAPACITANCE IS EXPRESSED IN PICOFARADS UNLESS OTHERWISE NOTED
5. REF 0000-3015-201 CONNECTOR BD CIRCUIT SCHEMATIC.
6. ALL RESISTORS ARE 1/4 W, 10% UNLESS OTHERWISE NOTED
7. IC GATES NOT USED:
X12C X16E & F
X7A B F X23B
X21F X26C & D
8. J9201 PIN NO'S NOT USED:
13, 14, 15
SEE SEPARATE BILL OF MATERIALS
INTERFACE BOARD
CIRCUIT SCHEMATIC
(AYC-1400A)
(80-153-01)
0000 3015 301
A
SHEET 1 OF 2


SERIAL CK OSCILLATOR
PART OF J9201 26 VAC 400Hz AC COMMON
SER CK HIGH
SER SIG LOW
SER SYNC HIGH
CHASIS GND 2
SER DATA HIGH
SER CLOCK FREQ A
SER CLOCK FREQ B
PART OF P9109 TO CONNECTOR B0
PI PULSE
RANGE REPLY
X/Y CHANNEL
PART OF J9203 TO CARD CAGE
CAL MARKS
SCOPE SYNC
PULSE
VIDEO
A/A INTERROGATIONS 20 MHz
EXT PRIOR
EXT SLS
EXT PULSE
A/A PRIORITY
SELF INTERROGATE
SER CK ENA SHT 1
INTER EN SHT 1
SER CK OUT HIGH
SER SYNC OUT HIGH
SER DATA OUT HIGH
ANALOG DAT HIGH
+5V PULSE HI
+5V INST LIGHT DRIVER
INST LIGHT RETURN
Y MOV
FREQ CMP
RANGE RATE DATA
SER SIG OUT LOW
SER DATA
SER SYNC
SER CLOCK
GARBLE Y AG
SER DATA
SER SYNC
SER CLOCK
PART OF J9201 TO CARD CAGE
CAL MARKS
SCOPE SYNC
PULSE
VIDEO
GND
A/A INTERROGATIONS 20 MHz
EXT PRIOR
EXT SLS
EXT PULSE
A/A PRIORITY
SELF INTERROGATE
PART OF P9109 TO CONNECTOR B1
CHANGE
SEE SHEET 1
APP'D
JUN 10 1987
INTERFACE BOARD
CIRCUIT SCHEMATIC
(ATC-1400A)
0000-3019-301
SHEET 2 OF 2

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 1

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-301 | A | PCB ASSY,INTERFACE | | 05/04/87 |

| STAT | REF.DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | | .00 | DWG-0006-3015-301 | SCHEM, INTERFACE, 1400A | 87/05/01 | 99/99/99 |
| ACT | *01 | 1.00 | 1700-3025-300 | PC BD,INTERFACE | 00/00/00 | 99/99/99 |
| ACT | *02 | 2.00 | 2803-0313-006 | SCREW,4-40 X 5/16 PPHM | 00/00/00 | 99/99/99 |
| ACT | *03 | 2.00 | 2840-0000-003 | WASHER,LOCK,INT TOOTH,4 | 00/00/00 | 99/99/99 |
| ACT | *04 | 2.00 | 2850-0000-020 | NUT,HEX,SMALL PAT,4-40 | 00/00/00 | 99/99/99 |
| ACT | C9201 | 7.00 | 1580-2202-420 | CAP,UF 22, 35V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C9202 | -.-- | 1580-2202-420 | CAP,UF 22, 35V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C9203 | 1.00 | 1580-4702-105 | CAP,UF 47, 10V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C9204 | 10.00 | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C9205 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C9206 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C9207 | 1.00 | 1506-0222-017 | CAP,PF 2200, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9208 | 1.00 | 1506-0471-017 | CAP,PF 470, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9209 | -.-- | 1580-2202-420 | CAP,UF 22, 35V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C9210 | -.-- | 1580-2202-420 | CAP,UF 22, 35V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C9211 | -.-- | 1580-2202-420 | CAP,UF 22, 35V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C9212 | -.-- | 1580-2202-420 | CAP,UF 22, 35V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C9213 | -.-- | 1580-2202-420 | CAP,UF 22, 35V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C9214 | 1.00 | 1506-0182-017 | CAP,PF 1800, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9215 | 1.00 | 1580-4792-305 | CAP,UF 4.7, 25V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C9216 | 11.00 | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9217 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9218 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9219 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9220 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9221 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 2

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-301 | A | PCB ASSY,INTERFACE | | 05/04/87 |

| STAT | REF.DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | C9222 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9223 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9224 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9225 | 1.00 | 1507-0685-020 | CAP,UF 6.8, 15V,TANT, 20 | 00/00/00 | 99/99/99 |
| ACT | C9226 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9227 | -.-- | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C9228 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C9229 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C9230 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C9231 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C9232 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C9233 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C9234 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C9235 | 1.00 | 1506-0101-017 | CAP,PF, 100, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | CR9201 | 14.00 | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9202 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9203 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9204 | 6.00 | 4815-0000-002 | DIODE, 1N4004 ,RECT, 400V, 1A | 00/00/00 | 99/99/99 |
| ACT | CR9205 | -.-- | 4815-0000-002 | DIODE, 1N4004 ,RECT, 400V, 1A | 00/00/00 | 99/99/99 |
| ACT | CR9206 | -.-- | 4815-0000-002 | DIODE, 1N4004 ,RECT, 400V, 1A | 00/00/00 | 99/99/99 |
| ACT | CR9207 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9208 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9209 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9210 | -.-- | 4815-0000-002 | DIODE, 1N4004 ,RECT, 400V, 1A | 00/00/00 | 99/99/99 |
| ACT | CR9211 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9212 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-3035-301 REVISION A DESCRIPTION PCB ASSY,INTERFACE LAST ECN DATE INC 05/04/87

| STAT | REF.DES. | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | CR9213 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9214 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9215 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9216 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9217 | -.-- | 4815-0000-002 | DIODE, 1N4004 ,RECT, 400V, 1A | 00/00/00 | 99/99/99 |
| ACT | CR9218 | -.-- | 4815-0000-002 | DIODE, 1N4004 ,RECT, 400V, 1A | 00/00/00 | 99/99/99 |
| ACT | CR9219 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | CR9220 | -.-- | 4815-0000-003 | DIODE, 1N4148 ,SIGNAL, 75PRV | 00/00/00 | 99/99/99 |
| ACT | J9201 | 1.00 | 2115-0000-021 | CONN MOLEX 22-05-2101 | 00/00/00 | 99/99/99 |
| ACT | J9202 | 1.00 | 2116-0000-021 | CONN,D-SUB,M,25-P,PCM,R A | 00/00/00 | 99/99/99 |
| ACT | Q9201 | 1.00 | 4807-0000-001 | TRANS, 2N3903 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q9202 | 3.00 | 4801-0000-004 | TRANS 2N2905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q9203 | 2.00 | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q9204 | 4.00 | 4801-0000-001 | TRANS, 2N2222 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q9205 | -.-- | 4807-0000-002 | TRANS, 2N3905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q9206 | -.-- | 4801-0000-001 | TRANS, 2N2222 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q9207 | -.-- | 4801-0000-001 | TRANS, 2N2222 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q9208 | -.-- | 4801-0000-004 | TRANS, 2N2905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | Q9209 | -.-- | 4801-0000-001 | TRANS, 2N2222 ,NPN HS SW | 00/00/00 | 99/99/99 |
| ACT | Q9210 | -.-- | 4801-0000-004 | TRANS, 2N2905 ,PNP HS SW | 00/00/00 | 99/99/99 |
| ACT | R9201 | 7.00 | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R9202 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R9203 | 5.00 | 4702-0223-003 | RES, 5, 1/4W, 22K OHM | 00/00/00 | 99/99/99 |
| ACT | R9204 | -.-- | 4702-0223-003 | RES, 5, 1/4W, 22K OHM | 00/00/00 | 99/99/99 |
| ACT | R9205 | -.-- | 4702-0223-003 | RES, 5, 1/4W, 22K OHM | 00/00/00 | 99/99/99 |
| ACT | R9206 | 9.00 | 4702-0471-003 | RES, 5, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |



STAT ==) ACT = ACTIVE VALUE
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==) OBS = OBSOLETE LISTING

ASSY NO 7010-3035-301 REVISION A DESCRIPTION PCB ASSY,INTERFACE LAST ECN DATE INC 05/04/87

| STAT | REF DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R9207 | 7.00 | 4702-0102-003 | RES, 5, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R9208 | 2.00 | 4703-0100-003 | RES, 5 1/2W, 10 OHM | 00/00/00 | 99/99/99 |
| ACT | R9209 | 1.00 | 4702-0271-003 | RES, 5, 1/4W, 270 OHM | 00/00/00 | 99/99/99 |
| ACT | R9210 | -.-- | 4702-0102-003 | RES, 5, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R9211 | 2.00 | 4702-0100-003 | RES, 5, 1/4W, 10 OHM | 00/00/00 | 99/99/99 |
| ACT | R9212 | 1.00 | 4702-0279-003 | RES, 5, 1/4W, 2.7 OHM | 00/00/00 | 99/99/99 |
| ACT | R9213 | -.-- | 4702-0100-003 | RES, 5, 1/4W, 10 OHM | 00/00/00 | 99/99/99 |
| ACT | R9214 | -.-- | 4702-0102-003 | RES, 5, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R9215 | -.-- | 4702-0102-003 | RES, 5, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R9216 | 1.00 | 4702-0101-003 | RES, 5, 1/4W, 100 OHM | 00/00/00 | 99/99/99 |
| ACT | R9217 | -.-- | 4702-0102-003 | RES, 5, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R9218 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R9219 | -.-- | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R9220 | -.-- | 4702-0102-003 | RES, 5, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R9221 | -.-- | 4702-0471-003 | RES, 5, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R9222 | 4.00 | 4702-0473-003 | RES, 5, 1/4W, 47K OHM | 00/00/00 | 99/99/99 |
| ACT | R9223 | -.-- | 4702-0473-003 | RES, 5, 1/4W, 47K OHM | 00/00/00 | 99/99/99 |
| ACT | R9224 | 6.00 | 4706-6040-001 | RES, 1, 1/4W, 604 OHM | 00/00/00 | 99/99/99 |
| ACT | R9225 | -.-- | 4706-6040-001 | RES, 1, 1/4W, 604 OHM | 00/00/00 | 99/99/99 |
| ACT | R9226 | 9.00 | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R9227 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R9228 | -.-- | 4706-6040-001 | RES, 1, 1/4W, 604 OHM | 00/00/00 | 99/99/99 |
| ACT | R9229 | -.-- | 4706-6040-001 | RES, 1, 1/4W, 604 OHM | 00/00/00 | 99/99/99 |
| ACT | R9230 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R9231 | -.-- | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R9232 | -.-- | 4706-6040-001 | RES, 1, 1/4W, 604 OHM | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 5

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-3035-301 REVISION A DESCRIPTION PCB ASSY,INTERFACE LAST ECN DATE INC 05/04/87

| STAT | REF.DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R9233 | -.-- | 4706-6040-001 | RES, 1, 1/4W, 604 OHM | 00/00/00 | 99/99/99 |
| ACT | R9234 | -.-- | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R9235 | -.-- | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R9236 | -.-- | 4702-0223-003 | RES, S, 1/4W, 22K OHM | 00/00/00 | 99/99/99 |
| ACT | R9237 | 1.00 | 4702-0104-003 | RES, S, 1/4W, 100K OHM | 00/00/00 | 99/99/99 |
| ACT | R9238 | -.-- | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R9239 | 2.00 | 4702-0122-003 | RES, S, 1/4W, 1.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R9240 | 4.00 | 4702-0470-003 | RES, S, 1/4W, 47 OHM | 00/00/00 | 99/99/99 |
| ACT | R9241 | -.-- | 4702-0122-003 | RES, S, 1/4W, 1.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R9242 | - -- | 4702-0470-003 | RES, S, 1/4W, 47 OHM | 00/00/00 | 99/99/99 |
| ACT | R9243 | 1.00 | 4706-1220-001 | RES, 1, 1/4W, 182 OHM | 00/00/00 | 99/99/99 |
| ACT | R9244 | 1.00 | 4706-1001-001 | RES, 1, 1/4W, 1.00K OHM | 00/00/00 | 99/99/99 |
| ACT | R9245 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R9246 | 11.00 | 0002-0006-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R9247 | 6.00 | 4702-0681-003 | RES, S, 1/4W, 680 OHM | 00/00/00 | 99/99/99 |
| ACT | R9248 | -.-- | 4702-0470-003 | RES, S, 1/4W, 47 OHM | 00/00/00 | 99/99/99 |
| ACT | R9249 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R9250 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R9251 | -.-- | 4702-0681-003 | RES, S, 1/4W, 680 OHM | 00/00/00 | 99/99/99 |
| ACT | R9252 | -.-- | 4702-0470-003 | RES, S, 1/4W, 47 OHM | 00/00/00 | 99/99/99 |
| ACT | R9253 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R9254 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R9255 | -.-- | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R9256 | 2.00 | 4752-0103-002 | POT, 10K OHM, 62-1-1-103 | 00/00/00 | 99/99/99 |
| ACT | R9257 | - -- | 4752-0103-002 | POT, 10K OHM, 62-1-1-103 | 00/00/00 | 99/99/99 |
| ACT | R9258 | - -- | 4702-0103-003 | RES, S, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 6

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

ASSY NO 7010-3035-301 REVISION A DESCRIPTION PCB ASSY,INTERFACE LAST ECN DATE INC 05/04/87

| STAT | REF.DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R9259 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R9260 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R9261 | - -- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R9262 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R9263 | -.-- | 4703-0100-003 | RES, S 1/2W, 10 OHM | 00/00/00 | 99/99/99 |
| ACT | R9264 | - -- | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R9265 | 1.00 | 4702-0224-003 | RES, S, 1/4W, 220K OHM | 00/00/00 | 99/99/99 |
| ACT | R9266 | - -- | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R9267 | -.-- | 4702-0472-003 | RES, S, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R9268 | -.-- | 4702-0102-003 | RES, S, 1/4W, 1.0K OHM | 00/00/00 | 99/99/99 |
| ACT | R9269 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R9270 | - -- | 4702-0473-003 | RES, S, 1/4W, 47K OHM | 00/00/00 | 99/99/99 |
| ACT | R9271 | -.-- | 4702-0473-003 | RES, S, 1/4W, 47K OHM | 00/00/00 | 99/99/99 |
| ACT | R9272 | -.-- | 4702-0681-003 | RES, S, 1/4W, 680 OHM | 00/00/00 | 99/99/99 |
| ACT | R9273 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R9274 | 2.00 | 4702-0680-003 | RES, S, 1/4W, 68 OHM | 00/00/00 | 99/99/99 |
| ACT | R9275 | -.-- | 4702-0681-003 | RES, S, 1/4W, 680 OHM | 00/00/00 | 99/99/99 |
| ACT | R9276 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R9277 | -.-- | 4702-0680-003 | RES, S, 1/4W, 68 OHM | 00/00/00 | 99/99/99 |
| ACT | R9278 | -.-- | 4702-0681-003 | RES, S, 1/4W, 680 OHM | 00/00/00 | 99/99/99 |
| ACT | R9279 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R9280 | -.-- | 4702-0681-003 | RES, S, 1/4W, 680 OHM | 00/00/00 | 99/99/99 |
| ACT | R9281 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R9282 | 1.00 | 4702-0153-003 | RES, S, 1/4W, 15K OHM | 00/00/00 | 99/99/99 |
| ACT | R9283 | -.-- | 4702-0471-003 | RES, S, 1/4W, 470 OHM | 00/00/00 | 99/99/99 |
| ACT | R9284 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |

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STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-301 | A | PCB ASSY,INTERFACE | | 05/04/87 |

| STAT | REF.DES. | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R9285 | -.-- | 4702-0223-003 | RES, S, 1/4W, 22K OHM | 00/00/00 | 99/99/99 |
| ACT | R9286 | 2.00 | 4702-0222-003 | RES, S, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R9287 | -.-- | 4702-0222-003 | RES, S, 1/4W, 2.2K OHM | 00/00/00 | 99/99/99 |
| ACT | R9288 | 1.00 | 4702-0390-003 | RES, S, 1/4W, 39 OHM | 00/00/00 | 99/99/99 |
| ACT | R9289 | 1.00 | 4703-0472-003 | RES, S, 1/2W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R9290 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R9291 | 2.00 | 4701-06R8-003 | RES, S, 1/8W, 6.8 OHM | 00/00/00 | 99/99/99 |
| ACT | R9292 | -.-- | 4701-0680-003 | RES, S, 1/8W, 68 OHM | 00/00/00 | 99/99/99 |
| ACT | RN9201 | 2.00 | 4690-0910-200 | RES NET,SIP,BUSS, 1K OHM,10-P | 00/00/00 | 99/99/99 |
| ACT | RN9202 | -.-- | 4690-0910-200 | RES NET,SIP,BUSS, 1K OHM,10-P | 00/00/00 | 99/99/99 |
| ACT | X9201 | 1.00 | 3131-0000-002 | IC,74LS10,TRIPLE 3-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X9202 | 1.00 | 3131-0000-045 | IC,74LS138,3-TO-8 DCDR/MPLYR | 00/00/00 | 99/99/99 |
| ACT | X9203 | 3.00 | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X9204 | 3.00 | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X9205 | -.-- | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X9206 | 4.00 | 3130-0000-027 | IC,7406,HEX INV BUFFER/DRIVER | 00/00/00 | 99/99/99 |
| ACT | X9207 | -.-- | 3130-0000-027 | IC,7406,HEX INV BUFFER/DRIVER | 00/00/00 | 99/99/99 |
| ACT | X9208 | -.-- | 3130-0000-027 | IC,7406,HEX INV BUFFER/DRIVER | 00/00/00 | 99/99/99 |
| ACT | X9209 | -.-- | 3131-0000-043 | IC,74LS377,OCTAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X9210 | -.-- | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X9211 | 1.00 | 3250-S001-000 | IC,8304,8-BIT BIDI TRANSCEIVER | 00/00/00 | 99/99/99 |
| ACT | X9212 | 2.00 | 3133-0000-019 | IC,4069UB,HEX INVERTER | 00/00/00 | 99/99/99 |
| ACT | X9213 | 1.00 | 3133-0000-001 | IC,4001B,QUAD 2-INPUT NOR | 00/00/00 | 99/99/99 |
| ACT | X9214 | 2.00 | 3224-0004-000 | IC,317T,1.5A 1.2-37V REGULATOR | 00/00/00 | 99/99/99 |
| ACT | X9215 | 3.00 | 3133-0000-014 | IC,3130,BIMOS OP AMP,METAL CAN | 00/00/00 | 99/99/99 |
| ACT | X9216 | -.-- | 3133-0000-019 | IC,4069UB,HEX INVERTER | 00/00/00 | 99/99/99 |



STAT ==) ACT = ACTIVE VALUE
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| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-301 | A | PCB ASSY,INTERFACE | | 05/04/87 |

| STAT | REF DES. | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | X9217 | -.-- | 3133-0000-014 | IC,3130,BIMOS OP AMP,METAL CAN | 00/00/00 | 99/99/99 |
| ACT | X9218 | -.-- | 3133-0000-014 | IC,3130,BIMOS OP AMP,METAL CAN | 00/00/00 | 99/99/99 |
| ACT | X9219 | -.-- | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X9220 | -.-- | 3224-0004-000 | IC,317T,1.5A 1.2-37V REGULATOR | 00/00/00 | 99/99/99 |
| ACT | X9221 | 1.00 | 3131-0000-033 | IC,74LS04,HEX INVERTER | 00/00/00 | 99/99/99 |
| ACT | X9222 | -.-- | 3130-0000-027 | IC,7406,HEX INV BUFFER/DRIVER | 00/00/00 | 99/99/99 |
| ACT | X9223 | 1.00 | 3131-0000-038 | IC,74LS74A,DUAL D FLIP-FLOP | 00/00/00 | 99/99/99 |
| ACT | X9224 | 2.00 | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X9225 | -.-- | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X9226 | 1.00 | 3131-0000-032 | IC,74LS02,QUAD 2-INPUT NOR | 00/00/00 | 99/99/99 |
| ACT | X9227 | 1.00 | 3131-0000-024 | IC,74LS123,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |

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| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-301 | A | PCB ASSY,INTERFACE | | 05/04/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 0002-0000-000 | | *** REF DESIG NOT USED *** | 11.00 | EA | F | R9246<br>R9250<br>R9254<br>R9260<br>R9262<br>R9273<br>R9276<br>R9279<br>R9281<br>R9284<br>R9290 |
| 1506-0101-017 | | CAP,PF, 100, 100V,NPO, 5 | 1.00 | EA | P3 | C9235 |
| 1506-0102-017 | | CAP,PF 1000, 100V,NPO, 5 | 11.00 | EA | P3 | C9216<br>C9217<br>C9218<br>C9219<br>C9220<br>C9221<br>C9222<br>C9223<br>C9224<br>C9226<br>C9227 |
| 1506-0182-017 | | CAP,PF 1800, 100V,NPO, 5 | 1.00 | EA | P3 | C9214 |
| 1506-0222-017 | | CAP,PF 2200, 100V,NPO, 5 | 1.00 | EA | P3 | C9207 |
| 1506-0471-017 | | CAP,PF 470, 100V,NPO, 5 | 1.00 | EA | P3 | C9208 |
| 1507-0685-020 | | CAP,UF 6.8, 15V,TANT, 20 | 1.00 | EA | P3 | C9225 |
| 1521-0000-008 | | CAP,UF .10, 50V,DIP,Z5U | 10.00 | EA | P3 | C9204<br>C9205<br>C9206<br>C9228<br>C9229<br>C9230<br>C9231<br>C9232<br>C9233<br>C9234 |

PRINT DATE 87/06/19 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 2

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-301 | A | PCB ASSY,INTERFACE | | 05/04/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 1580-2202-420 | | CAP,UF 22, 35V,ELE,RDL | 7.00 | EA | P3 | C9201<br>C9208<br>C9209<br>C9210<br>C9211<br>C9212<br>C9213 |
| 1580-4702-105 | | CAP,UF 47, 10V,ELE,RDL | 1.00 | EA | P3 | C9203 |
| 1580-4792-305 | | CAP,UF 4.7, 25V,ELE,RDL | 1.00 | EA | P3 | C9215 |
| 1700-3025-300 | A1 | PC BD,INTERFACE | 1.00 | EA | P6 | *01 |
| 2115-0000-021 | | CONN MOLEX 22-05-2181 | 1.00 | EA | P2 | J9201 |
| 2116-0000-021 | | CONN,D-SUB,M,25-P,PCM,R.A | 1.00 | EA | P2 | J9202 |
| 2803-0313-006 | | SCREW,4-40 X 5/16 PPHM | 2.00 | EA | F4 | *02 |
| 2840-0000-003 | | WASHER,LOCK,INT TOOTH,4 | 2.00 | EA | F4 | *03 |
| 2850-0000-020 | | NUT,HEX,SMALL PAT,4-40 | 2.00 | EA | F4 | *04 |
| 3130-0000-027 | | IC,7406,HEX INV BUFFER/DRIVER | 4.00 | EA | P2 | X9206<br>X9207<br>X9208<br>X9222 |
| 3131-0000-002 | | IC,74LS10,TRIPLE 3-INPUT NAND | 1.00 | EA | P2 | X9201 |
| 3131-0000-017 | | IC,74LS221,DUAL MULTIVIBRATOR | 2.00 | EA | P2 | X9224<br>X9225 |
| 3131-0000-024 | | IC,74LS123,DUAL MULTIVIBRATOR | 1.00 | EA | P2 | X9227 |
| 3131-0000-032 | | IC,74LS02,QUAD 2-INPUT NOR | 1.00 | EA | P2 | X9226 |

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PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 3

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC. |
|---|---|---|---|---|
| 7010-3035-301 | A | PCB ASSY,INTERFACE | | 05/04/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 3131-0000-033 | | IC,74LS04,HEX INVERTER | 1.00 | EA | P2 | X9221 |
| 3131-0000-038 | | IC,74LS74A,DUAL D FLIP-FLOP | 1.00 | EA | P2 | X9223 |
| 3131-0000-043 | | IC,74LS377,OCTAL D FLIP-FLOP | 3.00 | EA | P2 | X9204 X9205 X9209 |
| 3131-0000-045 | | IC,74LS138,3-TO-8 DCDR/MPLXR | 1.00 | EA | P2 | X9202 |
| 3133-0000-001 | | IC,4001B,QUAD 2-INPUT NOR | 1.00 | EA | P2 | X9213 |
| 3133-0000-014 | | IC,3130,BIMOS OP AMP,METAL CAN | 3.00 | EA | P2 | X9215 X9217 X9218 |
| 3133-0000-019 | | IC,4069UB,HEX INVERTER | 2.00 | EA | P2 | X9212 X9216 |
| 3211-3244-000 | | IC,74LS244,OCTAL BUF/DRVR/RCVR | 3.00 | EA | P2 | X9203 X9210 X9219 |
| 3224-0004-000 | | IC,317T,1.5A 1.2-37V REGULATOR | 2.00 | EA | P2 | X9214 X9220 |
| 3250-5001-000 | | IC,8304,8-BIT BIDI TRANSCEIVER | 1.00 | EA | P2 | X9211 |
| 4690-0910-200 | | RES NET,SIP,BUSS, 1K OHM,10-P | 2.00 | EA | P4 | RN9201 RN1302 |
| 4701-0680-003 | | RES, S, 1/8W, 68 OHM | 2.00 | EA | P4 | R9291 R9292 |
| 4702-0100-003 | | RES, S, 1/4W, 10 OHM | 2.00 | EA | P4 | R9211 R9213 |
| 4702-0101-003 | | RES, S, 1/4W, 100 OHM | 1.00 | EA | P4 | R9216 |

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| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC. |
|---|---|---|---|---|
| 7010-3035-301 | A | PCB ASSY,INTERFACE | | 05/04/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 4702-0102-003 | | RES, S, 1/4W, 1.0K OHM | 7.00 | EA | P4 | R9207 R9210 R9214 R9215 R9217 R9226 R9268 |
| 4702-0103-003 | | RES, S, 1/4W, 10K OHM | 5.00 | EA | P4 | R9226 R9227 R9230 R9231 R9234 R9235 R9238 R9255 R9258 |
| 4702-0104-003 | | RES, S, 1/4W, 100K OHM | 1.00 | EA | P4 | R9237 |
| 4702-0122-003 | | RES, S, 1/4W, 1.2K OHM | 2.00 | EA | P4 | R9239 R9241 |
| 4702-0153-003 | | RES, S, 1/4W, 15K OHM | 1.00 | EA | P4 | R9282 |
| 4702-0222-003 | | RES, S, 1/4W, 2.2K OHM | 2.00 | EA | P4 | R9286 R9287 |
| 4702-0223-003 | | RES, S, 1/4W, 22K OHM | 5.00 | EA | P4 | R9203 R9204 R9205 R9236 R9285 |
| 4702-0224-003 | | RES, S, 1/4W, 220K OHM | 1.00 | EA | P4 | R9265 |
| 4702-0271-003 | | RES, S, 1/4W, 270 OHM | 1.00 | EA | P4 | R9209 |
| 4702-0279-003 | | RES, S, 1/4W, 2.7 OHM | 1.00 | EA | P4 | R9212 |
| 4702-0390-003 | | RES, S, 1/4W, 39 OHM | 1.00 | EA | P4 | R9288 |

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PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 5

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC. |
|---|---|---|---|---|
| 7010-3035-301 | A | PCB ASSY,INTERFACE | | 05/04/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 4702-0470-003 | | RES, S, 1/4W, 47 OHM | 4.00 | EA | P4 | /\/\/\/\/\ R9240 R9242 R9248 R9252 |
| 4702-0471-003 | | RES, S, 1/4W, 470 OHM | 9.00 | EA | P4 | /\/\/\/\/\ R9206 R9221 R9245 R9249 R9253 R9259 R9261 R9269 R9283 |
| 4702-0472-003 | | RES, S, 1/4W, 4.7K OHM | 7.00 | EA | P4 | /\/\/\/\/\ R9201 R9202 R9218 R9219 R9264 R9266 R9267 |
| 4702-0473-003 | | RES, S, 1/4W, 47K OHM | 4.00 | EA | P4 | /\/\/\/\/\ R9222 R9223 R9270 R9271 |
| 4702-0680-003 | | RES, S, 1/4W, 68 OHM | 2.00 | EA | P4 | /\/\/\/\/\ R9274 R9277 |
| 4702-0681-003 | | RES, S, 1/4W, 680 OHM | 6.00 | EA | P4 | /\/\/\/\/\ R9247 R9251 R9272 R9275 R9278 R9280 |
| 4703-0100-003 | | RES, S 1/2W, 10 OHM | 2.00 | EA | P4 | /\/\/\/\/\ R9208 R9263 |
| 4703-0472-003 | | RES, S, 1/2W, 4.7K OHM | 1.00 | EA | P4 | /\/\/\/\/\ R9289 |
| 4706-1001-001 | | RES, 1, 1/4W, 1.00K OHM | 1.00 | EA | P4 | /\/\/\/\/\ |

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 6

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC. |
|---|---|---|---|---|
| 7010-3035-301 | A | PCB ASSY,INTERFACE | | 05/04/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | R9244 |
| 4706-1820-001 | | RES, 1, 1/4W, 182 OHM | 1.00 | EA | P4 | /\/\/\/\/\ R9243 |
| 4706-6040-001 | | RES, 1, 1/4W, 604 OHM | 6.00 | EA | P4 | /\/\/\/\/\ R9224 R9225 R9226 R9229 R9232 R9233 |
| 4752-0103-002 | | POT, 10K OHM, 62-1-1-103 | 2.00 | EA | P4 | /\/\/\/\/\ R9256 R9257 |
| 4801-0000-001 | -- | TRANS, 2N2222 ,NPN HS SU | 4.00 | EA | P2 | /\/\/\/\/\ Q9204 Q9206 Q9207 QTE11 |
| 4801-0000-004 | | TRANS, 2N2905 ,PNP HS SU | 3.00 | EA | P2 | /\/\/\/\/\ Q9202 Q9208 Q9210 |
| 4807-0000-001 | | TRANS, 2N3903 ,NPN HS SU | 1.00 | EA | P2 | /\/\/\/\/\ Q9201 |
| 4807-0000-002 | | TRANS, 2N3905 ,PNP HS SU | 2.00 | EA | P2 | /\/\/\/\/\ Q9203 Q9205 |
| 4815-0000-002 | | DIODE, 1N4004 ,RECT, 400V, 1A | 4.00 | EA | P2 | /\/\/\/\/\ CR9204 CR9205 CR9206 CR9210 CR9217 CR9218 |
| 4815-0000-003 | | DIODE, 1N4148 ,SIGNAL, 75PRV | 14.00 | EA | P2 | /\/\/\/\/\ CR9201 CR9202 CR9203 CR9207 CR9208 CR9209 CR9211 CR9212 |

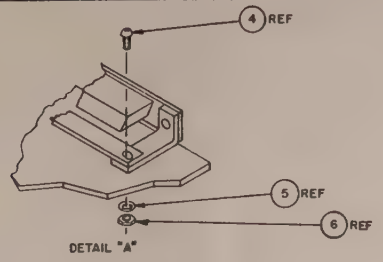
JUN 18 1987

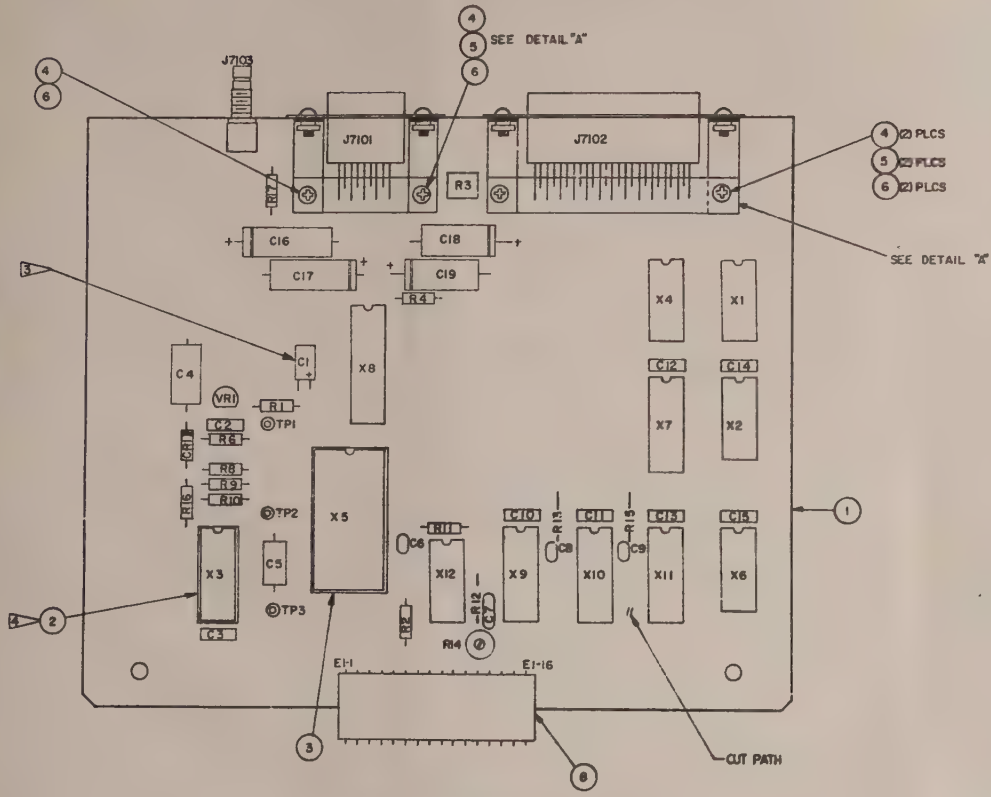
| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-301 | A | PCB ASSY,INTERFACE | | 05/04/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| | | | | | | CR9213<br>CR9214<br>CR9215<br>CR9216<br>CR9219<br>CR9220 |
| DWG-0000-3015-301 | A | SCHEM, INTERFACE, 1400A | .00 | EA | X | ^^^^^^ |

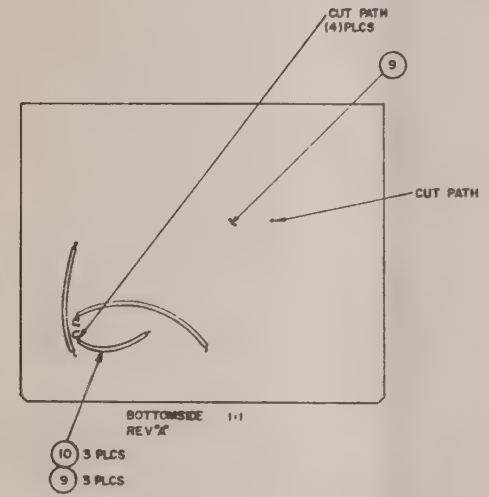
JUN 18 1987

| REV | | DESCRIPTION |
|---|---|---|
| | A | DESIGN RELEASE |



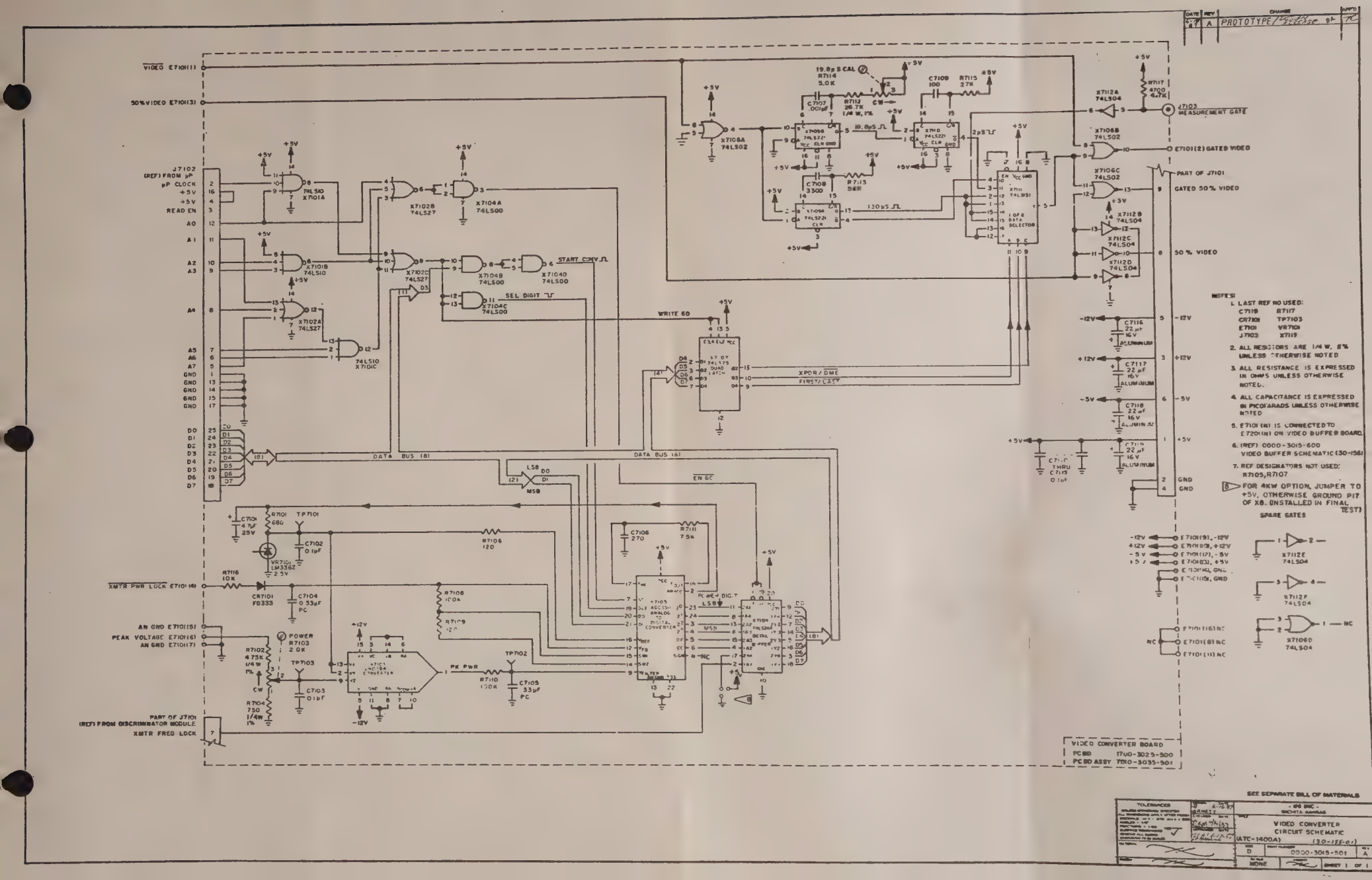

7010-3035-501 (30-355-00 SHOWN




NOTES:
1. ALL REFERENCE DESIGNATORS CARRY AN ASSIGNED DESIGNATOR SERIES THIS DRAWING CARRIES SERIES 7100 (ie U1 IS R7101)
2. REFERENCE SCHEMATIC IS 0000-3015-501
3. C1 TO LAY FLAT ON P.C. BOARD (ITEM 1)
4. MAKE SURE X3 IS SEATED ALL THE WAY INTO THE SOCKET

JUN 18 1987

| | | |
|---|---|---|
| WAW 6-11-87 | P.C. BOARD ASSY VIDEO CONVERTER AVC 1400A | 30-355-01 |
| LR 6-12-87 | | |
| DRA 6-17-87 | D 7010-3035-501 | A |




NOTES:

1. LAST REF NO USED:
   C7119 R7117
   CR7101 TP7103
   E7101 VR7101
   J7103 X7113
2. ALL RESISTORS ARE 1/4 W, 5% UNLESS OTHERWISE NOTED
3. ALL RESISTANCE IS EXPRESSED IN OHMS UNLESS OTHERWISE NOTED.
4. ALL CAPACITANCE IS EXPRESSED IN PICOFARADS UNLESS OTHERWISE NOTED
5. E7101 (11) IS CONNECTED TO E7201(11) ON VIDEO BUFFER BOARD.
6. (REF) 0000-3015-600 VIDEO BUFFER SCHEMATIC (30-156)
7. REF DESIGNATORS NOT USED: R7105, R7107
8. FOR 4KW OPTION, JUMPER TO +5V, OTHERWISE GROUND PIN OF X8. (INSTALLED IN FINAL TEST)

SPARE GATES

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 1

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO. | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-501 | A | PCB ASSY,VIDEO CONVERTER | | 05/04/87 |

| STAT | REF DES. | QTY | COMP. PART NO. | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | | .00 | DWG-0000-3015-501 | SCHEM,VIDEO CONVERTER, 1400A | 87/05/05 | 99/99/99 |
| ACT | *01 | 1.00 | 1700-3035-500 | PC BD,VIDEO CONVERTER | 00/00/00 | 99/99/99 |
| ACT | *02 | 1.00 | 3101-0500-205 | SOCKET,16-P DIP,ICA-163-S-G | 00/00/00 | 99/99/99 |
| ACT | *03 | 1.00 | 3101-0000-006 | SOCKET ICN-246-S4G | 00/00/00 | 99/99/99 |
| ACT | *04 | 4.00 | 2803-0313-006 | SCREW,4-40 X 5/16 PPHM | 00/00/00 | 99/99/99 |
| ACT | *05 | 3.00 | 2840-0000-003 | WASHER,LOCK,INT TOOTH,4 | 00/00/00 | 99/99/99 |
| ACT | *06 | 4.00 | 2850-0000-020 | NUT,HEX,SMALL PAT,4-40 | 00/00/00 | 99/99/99 |
| ACT | *08 | .09 | 6009-0001-000 | FLEX STRIP,NM,.10C,180 COND,1" | 00/00/00 | 99/99/99 |
| ACT | *09 | .00 | 1050-0000-075 | WIRE,BUS,TINNED COPPER 26GA | 87/04/22 | 99/99/99 |
| ACT | *10 | 1.00 | 6011-0018-001 | TUBING,TF,26 AWG,NATURAL,1W | 87/04/22 | 99/99/99 |
| ACT | C7101 | 1.00 | 1580-4792-305 | CAP,UF 4.7, 25V,ELE,RDL | 00/00/00 | 99/99/99 |
| ACT | C7102 | 8.00 | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C7103 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C7104 | 2.00 | 1502-0334-012 | CAP,UF .33, 50V,MPC, 5 | 00/00/00 | 99/99/99 |
| ACT | C7105 | -.-- | 1502-0334-012 | CAP,UF .33, 50V,MPC, 5 | 00/00/00 | 99/99/99 |
| ACT | C7106 | 1.00 | 1506-0271-017 | CAP,PF 270, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C7107 | 1.00 | 1506-0102-017 | CAP,PF 1000, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C7108 | 1.00 | 1506-0332-017 | CAP,PF 3300, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C7109 | 1.00 | 1506-0101-017 | CAP,PF, 100, 100V,NPO, 5 | 00/00/00 | 99/99/99 |
| ACT | C7110 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C7111 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C7112 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C7113 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C7114 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C7115 | -.-- | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 00/00/00 | 99/99/99 |
| ACT | C7116 | 4.00 | 1580-2202-016 | CAP,UF, 22, 16V,ELE 20 | 87/03/05 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY REF DESIG PAGE 2

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3035-501 | A | PCB ASSY,VIDEO CONVERTER | | 05/04/87 |

| STAT | REF DES. | QTY | COMP. PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | C7117 | -.-- | 1580-2202-016 | CAP,UF, 22, 16V,ELE 20 | 87/03/05 | 99/99/99 |
| ACT | C7118 | -.-- | 1580-2202-016 | CAP,UF, 22, 16V,ELE 20 | 87/03/05 | 99/99/99 |
| ACT | C7119 | -.-- | 1580-2202-016 | CAP,UF, 22, 16V,ELE 20 | 87/03/05 | 99/99/99 |
| ACT | CR7101 | 1.00 | 4831-0000-001 | DIODE,FDH333 ,SIGNAL,MELL | 00/00/00 | 99/99/99 |
| ACT | J7101 | 1.00 | 2205-3510-101 | CONN,D-SUB,M, 9-P,PCM,R A | 00/00/00 | 99/99/99 |
| ACT | J7102 | 1.00 | 2116-0000-021 | CONN,D-SUB,M,25-P,PCM,P A | 00/00/00 | 99/99/99 |
| ACT | J7103 | 1.00 | 2200-2094-200 | CONN,M SMB,PC MTG,RIGHT ANGLE | 00/00/00 | 99/99/99 |
| ACT | R7101 | 1.00 | 4702-0681-003 | RES, 5, 1/4W, 680 OHM | 00/00/00 | 99/99/99 |
| ACT | R7102 | 1.00 | 4706-4751-001 | RES, 1, 1/4W, 4.75K OHM | 00/00/00 | 99/99/99 |
| ACT | R7103 | 1.00 | 4756-3120-200 | POT, 2K OHM, 3339W-1-202 | 00/00/00 | 99/99/99 |
| ACT | R7104 | 1.00 | 4706-7500-001 | RES, 1, 1/4W, 750 OHM | 00/00/00 | 99/99/99 |
| ACT | R7105 | 2.00 | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R7106 | 2.00 | 4702-0121-003 | RES, 5, 1/4W, 120 OHM | 00/00/00 | 99/99/99 |
| ACT | R7107 | -.-- | 0002-0000-000 | *** REF DESIG NOT USED *** | 00/00/00 | 99/99/99 |
| ACT | R7108 | 2.00 | 4702-0104-003 | RES, 5, 1/4W, 100K OHM | 00/00/00 | 99/99/99 |
| ACT | R7109 | -.-- | 4702-0121-003 | RES, 5, 1/4W, 120 OHM | 00/00/00 | 99/99/99 |
| ACT | R7110 | -.-- | 4702-0104-003 | RES, 5, 1/4W, 100K OHM | 00/00/00 | 99/99/99 |
| ACT | R7111 | 1.00 | 4702-0752-002 | RES, 5, 1/4W, 7.5K OHM | 00/00/00 | 99/99/99 |
| ACT | R7112 | 1.00 | 4706-2672-001 | RES, 1, 1/4W, 26.7K OHM | 00/00/00 | 99/99/99 |
| ACT | R7113 | 1.00 | 4702-0563-003 | RES, 5, 1/4W, 56K OHM | 00/00/00 | 99/99/99 |
| ACT | R7114 | 1.00 | 4752-0502-002 | POT, 5K OHM, 62-1-1-502 | 00/00/00 | 99/99/99 |
| ACT | R7115 | 1.00 | 4702-0273-003 | RES, 5, 1/4W, 27K OHM | 00/00/00 | 99/99/99 |
| ACT | R7116 | 1.00 | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 00/00/00 | 99/99/99 |
| ACT | R7117 | 1.00 | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 00/00/00 | 99/99/99 |
| ACT | TP7101 | 3.00 | 2106-0000-007 | TERM,GND,USECO 90518-5 OR -7 | 00/00/00 | 99/99/99 |
| ACT | TP7102 | -.-- | 2106-0000-007 | TERM,GND,USECO 90518-5 OR -7 | 00/00/00 | 99/99/99 |

PRINT DATE 87/06/18 BILL OF MATERIAL LISTED BY SEP DESIG PAGE 1 STAT: ACT = ACTIVE VALUE

(88) PND = PENDING VALUE

OBS = OBSOLETE LISTING

ASSY NO 7010-3035-501 REVISION A DESCRIPTION PCB ASSY,VIDEO CONVERTER LAST ECN DATE INC 05/04/87

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | TP7103 | - -- | 2106-0000-007 | TERM,GND,USECC 9051B-5 OR - | 00/00/00 | [illegible] |
| ACT | VR7101 | 1 00 | 3225-0001-000 | IC,336,2P 5V/2.5V REFERENCE | 00/00/00 | [illegible] |
| ACT | X7101 | 1 00 | 3131-0000-002 | IC,74LS10,TRIPLE 3-INPUT NAND | 00/00/00 | 99/99/99 |
| ACT | X7102 | 1 00 | 3131-0000-025 | IC,74LS27,TRIPLE 3-INPUT NOR | 00/00/00 | 99/99/99 |
| ACT | X7103 | 1 00 | 3235-9001-000 | IC,0094,MULTIFUNCT CONVERTER | 00/00/00 | [illegible] |
| ACT | X7104 | 1 00 | 3131-0000-144 | IC,74LS00 QUAD 2-INPUT NAND | 00/00/00 | [illegible] |
| ACT | X7105 | 1 00 | 3221-0001-000 | IC 3511 A/D CONVERTER | 00/00/00 | [illegible] |
| ACT | X7106 | 1 00 | 3131-0000-032 | IC,74LS02,QUAD 2-INPUT NOR | 00/00/00 | 99/99/99 |
| ACT | X7107 | 1 00 | 3131-0000-005 | IC,74LS75,4-BIT BISTABLE LATCH | 00/00/00 | 99/99/99 |
| ACT | X7108 | 1 00 | 3211-3244-000 | IC,74LS244,OCTAL BUF/DRVR/RCVR | 00/00/00 | 99/99/99 |
| ACT | X7109 | 2 00 | 3131-0000-017 | IC,74LS221 DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X7110 | - -- | 3131-0000-017 | IC,74LS221,DUAL MULTIVIBRATOR | 00/00/00 | 99/99/99 |
| ACT | X7111 | 1 00 | 3131-0000-009 | IC,74LS151,1-OF-8 SEL/MPLXR | 00/00/00 | 99/99/99 |
| ACT | X7112 | 1 00 | 3131-0000-033 | IC,74LS04,HEX INVERTER | 00/00/00 | 99/99/99 |

JUN 18 1987

PRINT DATE 87/06/18 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

ASSY NO 7010-3035-501 | REVISION A | DESCRIPTION PCB ASSY,VIDEO CONVERTER | LAST ECN | DATE INC 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 0002-0000-000 | | *** REF DESIG NOT USED *** | 2.00 | EA | F | R7105 R7107 |
| 1050-0000-075 | | WIRE,BUS,TINNED COPPER,26GA | .00 | SP | F5 | *09 |
| 1502-0334-012 | | CAP,UF .33, 50V,MPC, S | 2.00 | EA | P3 | C7104 C7105 |
| 1506-0101-017 | | CAP,PF 100, 100V,NPO, S | 1.00 | EA | P3 | C7109 |
| 1506-0102-017 | | CAP,PF 1000, 100V,NPO, S | 1.00 | EA | P3 | C7107 |
| 1506-0271-017 | | CAP,PF 270, 100V,NPO, S | 1.00 | EA | P3 | C7106 |
| 1506-0332-017 | | CAP,PF 3300, 100V,NPO, S | 1.00 | EA | P3 | C7108 |
| 1521-0000-008 | | CAP,UF .10, 50V,DIP,Z5U | 8.00 | EA | P3 | C7102 C7103 C7110 C7111 C7112 C7113 C7114 C7115 |
| 1580-2202-016 | -- | CAP,UF, 22, 16V ,ELE 20 | 4.00 | EA | P3 | C7116 C7117 C7118 C7119 |
| 1580-4792-305 | | CAP,UF 4.7, 25V,ELE,RDL | 1.00 | EA | P3 | C7101 |
| 1700-3025-500 | A | PC BD,VIDEO CONVERTER | 1.00 | EA | P6 | *01 |
| 2106-0000-007 | | TERM,GND,USECO 9051B-5 OR -7 | 3.00 | EA | F4 | TP7101 TP7102 TP7103 |
| 2116-0000-021 | | CONN,D-SUB,M,25-P,PCM,R A | 1.00 | EA | P2 | J7102 |

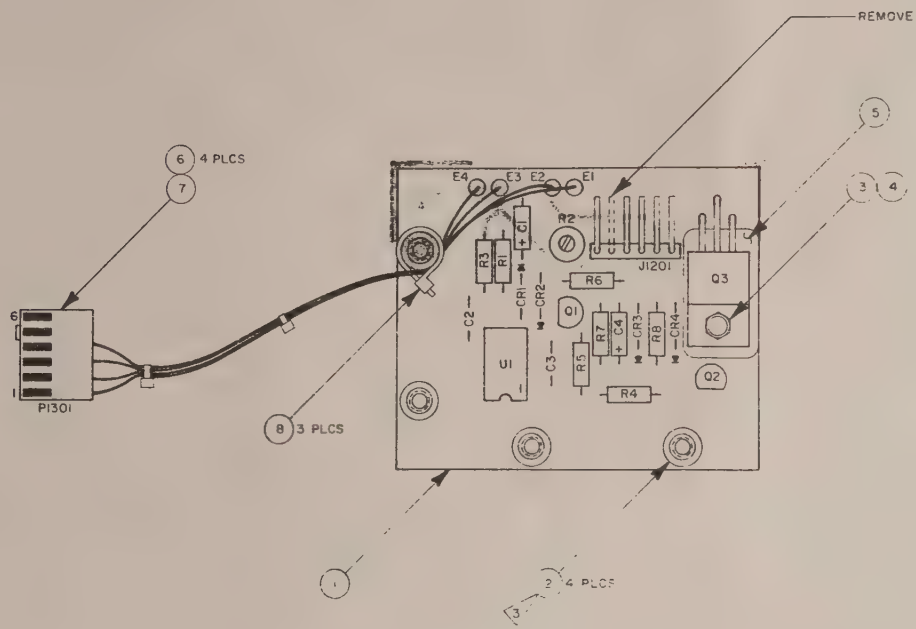
PRINT DATE 87/06/19 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 2

ASSY NO 7010-3035-501 | REVISION A | DESCRIPTION PCB ASSY,VIDEO CONVERTER | LAST ECN | DATE INC 05/04/87

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 2200-2094-200 | | CONN,M SMB,PC MTG,RIGHT ANGLE | 1.00 | EA | P2 | J7103 |
| 2205-3510-101 | | CONN,D-SUB,M, 9-P,PCM,R A | 1.00 | EA | P2 | J7101 |
| 2803-0313-006 | | SCREW,4-40 X 5/16 PPHM | 4.00 | EA | F4 | *04 |
| 2840-0000-003 | | WASHER,LOCK,INT TOOTH,4 | 3.00 | EA | F4 | *05 |
| 2850-0000-020 | | NUT HEX,SMALL PAT,4-40 | 4.00 | EA | F4 | *06 |
| 3101-0000-006 | | SOCKET ICN-246-S4G | 1.00 | EA | P2 | *03 |
| 3101-0500-205 | | SOCKET,16-P DIP,ICA-163-S-G | 1.00 | EA | P2 | *02 |
| 3131-0000-002 | | IC,74LS10,TRIPLE 3-INPUT NAND | 1.00 | EA | P2 | X7101 |
| 3131-0000-005 | | IC,74LS75,4-BIT BISTABLE LATCH | 1.00 | EA | P2 | X7107 |
| 3131-0000-009 | | IC,74LS151,1-OF-8 SEL/MPLXR | 1.00 | EA | P2 | X7111 |
| 3131-0000-017 | | IC,74LS221,DUAL MULTIVIBRATOR | 2.00 | EA | P2 | X7109 X7110 |
| 3131-0000-025 | | IC,74LS27,TRIPLE 3-INPUT NOR | 1.00 | EA | P2 | X7102 |
| 3131-0000-032 | | IC,74LS02,QUAD 2-INPUT NOR | 1.00 | EA | P2 | X7106 |
| 3131-0000-033 | | IC,74LS04,HEX INVERTER | 1.00 | EA | P2 | X7112 |
| 3131-0000-044 | | IC,74LS00,QUAD 2-INPUT NAND | 1.00 | EA | P2 | X7104 |
| 3211-3244-000 | | IC,74LS244,OCTAL BUF/DRVR/RCVR | 1.00 | EA | P2 | X7108 |
| 3225-0001-000 | | IC,336,+2.5V/-2.5V REFERENCE | 1.00 | EA | P2 | VR7101 |

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| DATE | REV | CHANGE | APVD |
|---|---|---|---|
| 3/23/87 | A | PRODUCTION RELEASE. ECN 9405 | VLH |
| 4-29-87 | A-1 | INC ECN 9709 | JS VLH |
| 5-4-87 | A-2 | INC RC 9787 | JS VLH |




NOTES

1. REF DES SERIES IS 1200 (E.G. R1 IS R1201)
2. REF SCHEMATIC IS 0000-3017-800
3. STANDOFFS ARE TO BE SWAGE PRESSED ON TOP OF BOARD. DO NOT SOLDER.

| FROM | | | | | |
|---|---|---|---|---|---|
| P1301-1 | | | | | |
| P1301-2 | | GND | | | |
| P1301-3 | | | | | |
| P1301-4 | | | | | |
| P1301-5 | E-4 | GND | | | |
| P1301-6 | N/C | | | | |
| P1301-7 | N/C | | | | |

JUN 18 1987

TOLERANCES, UNLESS OTHERWISE SPECIFIED

MATERIAL

IFR SYSTEMS INC

DRAWN

CHECKED

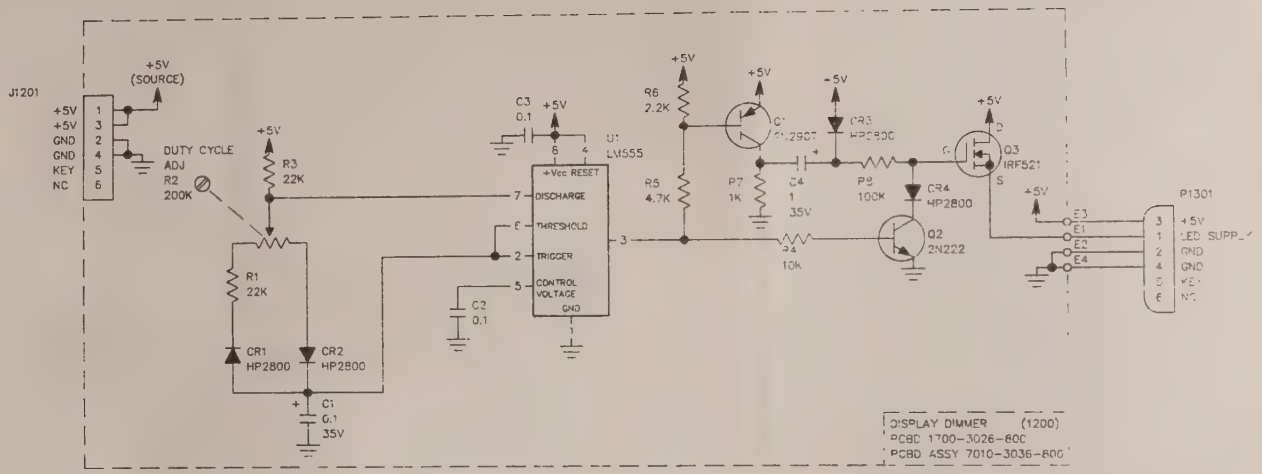
APPROVED

TITLE
PC BD ASSY
DISPLAY DIMMER

SIZE C | DWG NO 7010-3036-800 | REV A-2

SCALE | DO NOT SCALE PRINT | SHEET 1 OF 1

| DATE | REV | CHANGE | APVD |
|---|---|---|---|
| 1/28/87 | A | PRODUCTION RELEASE. ECN 9685 | VLH |
| 4/29/87 | A-1 | INC RC 9787 JS | VLH |




STANDARDS:
(UNLESS OTHERWISE NOTED)
1. ALL REF NOS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES: 1200
2. ALL RESISTORS ARE 1/4W, 5% TOLERANCE.
3. ALL RESISTANCE IS EXPRESSED IN OHMS.
4. ALL CAPACITANCE IS EXPRESSED IN MICRO FARADS.

NOTES
(UNLESS OTHERWISE NOTED)
1. LAST REF NOS USED
C4 CR4 E4 J1201 R8 Q3 U1 P13C1

2. REF NOS NOT USED.
NONE

JUN 18 1987

IFR SYSTEMS INC
10200 West York St., Wichita, Kansas 67215

| | | |
|---|---|---|
| DRAWN D.LOVING | DATE 2-20-87 | TITLE CIRCUIT SCHEMATIC DISPLAY DIMMER |
| CHECKED | DATE | |
| APPROVED | DATE | SIZE C |
| | | DWG. NO. 0000-3017-800 |
| | | REV A-1 |
| | | SCALE: DO NOT SCALE |
| | | FSCM 51190 SHEET 1 OF 1 |

PRINT DATE 87/06/20 BILL OF MATERIAL LISTED BY REF DESIG. PAGE 1

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3036-800 | A2 | PCB ASSY,DISPLAY DIMMER | 3787 | 04/30/87 |

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | | 1.00 | 6002-0000-006 | WIRE,HOOK,TFE,22GA, 7S,GREEN | 87/02/05 | 99/99/99 |
| ACT | | 1.00 | 6002-0000-007 | WIRE,HOOK,TFE,22GA, 7S,BLUE | 87/02/05 | 99/99/99 |
| ACT | | .08 | DWG-0000-3017-800 | SCHEM,DISPLAY DIMMER, 1400A | 87/05/05 | 99/99/99 |
| ACT | *01 | 1.00 | 1700-3026-800 | PC BD,DISPLAY DIMMER | 87/02/05 | 99/99/99 |
| ACT | *02 | 4.00 | 2850-0008-113 | SPACER,SM,1/4*1/4*6-32THD | 87/02/06 | 99/99/99 |
| ACT | *03 | 1.00 | 2803-0375-050 | SCREW,4-40 X 3/8 SBHMS,NYLON | 87/02/05 | 99/99/99 |
| ACT | *04 | 1.00 | 2850-0000-026 | NUT,HEX,SMALL PAT,4-40 | 87/02/05 | 99/99/99 |
| ACT | *05 | 1.00 | 4835-0000-103 | INSUL,MICA,TO-220 TRANS,DF103B | 87/02/05 | 99/99/99 |
| ACT | *06 | 4.00 | 2114-0000-022 | CONTACT,DCANT,CRIMP,22-30,TIN | 87/04/23 | 99/99/99 |
| ACT | *07 | 1.00 | 2127-9900-100 | KEY,POLARIZIN,MOLEX 15-04-9209 | 87/02/05 | 99/99/99 |
| ACT | *08 | 3.00 | 6004-6005-550 | TY-RAP,5.5 LG | 87/02/26 | 99/99/99 |
| ACT | C1201 | 1.00 | 1507-0104-018 | CAP,UF .10, 35V,TANT, 20 | 87/02/06 | 99/99/99 |
| ACT | C1202 | 2.00 | 1521-0000-008 | CAP,UF .10, 50V,DIP,Z5U | 87/02/06 | 99/99/99 |
| ACT | C1203 | - -- | 1521-0000-006 | CAP,UF .10, 50V,DIP,Z5U | 87/02/06 | 99/99/99 |
| ACT | C1204 | 1.00 | 1507-0105-018 | CAP,UF 1.0, 35V,TANT, 20 | 87/02/06 | 99/99/99 |
| ACT | CR1201 | 4.00 | 4816-0000-001 | DIODE,5082-2800,5 BAR, 70VBR | 87/02/05 | 99/99/99 |
| ACT | CR1202 | - -- | 4816-0000-001 | DIODE,5082-2800,5 BAR, 70VBR | 87/02/05 | 99/99/99 |
| ACT | CR1203 | - -- | 4816-0000-001 | DIODE,5082-2800,5 BAR, 70VBR | 87/02/05 | 99/99/99 |
| ACT | CR1204 | - -- | 4816-0000-001 | DIODE,5082-2800,5 BAR, 70VBR | 87/02/05 | 99/99/99 |
| ACT | J1201 | 1.00 | 2115-1002-006 | CONN,MOLEX 22-05-2061 | 87/02/05 | 99/99/99 |
| ACT | P1301 | 1.00 | 2115-0001-006 | CONN,MOLEX 22-01-2061 | 87/02/05 | 99/99/99 |
| ACT | Q1201 | 1.00 | 4805-0000-001 | TRANS,2N2907A,PNP HS SW (3251) | 87/02/05 | 99/99/99 |
| ACT | Q1202 | 1.00 | 4801-0000-001 | TRANS, 2N2222 .NPN HS SW | 87/02/05 | 99/99/99 |
| ACT | Q1203 | 1.00 | 5050-2452-100 | TRANS,IRF-521,520,N-CH MOSFET | 87/02/05 | 99/99/99 |
| ACT | R1201 | 2.00 | 4702-0223-003 | RES, 5, 1/4W, 22K OHM | 87/02/05 | 99/99/99 |
| ACT | R1202 | 1.00 | 4752-0234-002 | POT,200K OHM, 62-1-1-204 | 87/02/05 | 99/99/99 |

PRINT DATE 87/06/20 BILL OF MATERIAL LISTED BY REF DESIG PAGE 2

STAT ==) ACT = ACTIVE VALUE
==) PND = PENDING VALUE
==) OBS = OBSOLETE LISTING

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3036-800 | A2 | PCB ASSY,DISPLAY DIMMER | 3787 | 04/30/87 |

| STAT | REF DES | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | R1203 | - -- | 4702-0223-003 | RES, 5, 1/4W, 22K OHM | 87/02/05 | 99/99/99 |
| ACT | R1204 | 1.00 | 4702-0103-003 | RES, 5, 1/4W, 10K OHM | 87/02/05 | 99/99/99 |
| ACT | R1205 | 1.00 | 4702-0472-003 | RES, 5, 1/4W, 4.7K OHM | 87/02/05 | 99/99/99 |
| ACT | R1206 | 1.00 | 4702-0222-003 | RES, 5, 1/4W, 2.2K OHM | 87/02/05 | 99/99/99 |
| ACT | R1207 | 1.00 | 4702-0102-003 | RES, 5, 1/4W, 1.0K OHM | 87/02/05 | 99/99/99 |
| ACT | R1208 | 1.00 | 4702-0104-003 | RES, 5, 1/4W, 100K OHM | 87/02/05 | 99/99/99 |
| ACT | U1201 | 1.00 | 3226-0004-000 | IC,555,TIMER | 87/02/05 | 99/99/99 |

JUN 18 1987

PRINT DATE 87/06/20 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 1

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3036-800 | A2 | PCB ASSY,DISPLAY DIMMER | 9787 | 04/30/87 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 1507-0104-018 | | CAP,UF .10, 35V,TANT, 20 | 1.00 | EA | P3 | C1201 |
| 1507-0105-018 | | CAP,UF 1.0, 35V,TANT, 20 | 1.00 | EA | P3 | C1204 |
| 1521-0000-008 | | CAP,UF .10, 50V,DIP,Z5U | 2.00 | EA | P3 | C1202 C1203 |
| 1700-3026-800 | A | PC BD,DISPLAY DIMMER | 1.00 | EA | P6 | #01 |
| 2114-0000-022 | -- | CONTACT,DCAMT,CRIMP,22-30,TIN | 4.00 | EA | F2 | #06 |
| 2115-0001-006 | | CONN,MOLEX 22-01-2061 | 1.00 | EA | P2 | P1301 |
| 2115-1002-006 | | CONN,MOLEX 22-05-2061 | 1.00 | EA | P2 | J1201 |
| 2127-9900-100 | | KEY,POLARIZIN,MOLEX 15-04-9209 | 1.00 | EA | P2 | #07 |
| 2803-0375-050 | | SCREW,4-40 X 3/8 SBMMS,NYLON | 1.00 | EA | F4 | #03 |
| 2850-0000-020 | | NUT,HEX,SMALL PAT.4-40 | 1.00 | EA | F4 | #04 |
| 2850-0000-113 | -- | SPACER,SM,1/4*1/4*6-32THD | 0.00 | EA | F4 | #02 |
| 3226-0004-000 | | IC,555,TIMER | 1.00 | EA | P2 | U1201 |
| 4702-0102-003 | | RES, 5, 1/4W, 1.0K OHM | 1.00 | EA | P4 | R1207 |
| 4702-0103-003 | | RES, 5, 1/4W, 10K OHM | 1.00 | EA | P4 | R1204 |
| 4702-0104-003 | | RES, 5, 1/4W, 100K OHM | 1.00 | EA | P4 | R1208 |
| 4702-0222-003 | | RES, 5, 1/4W, 2.2K OHM | 1.00 | EA | P4 | R1206 |
| 4702-0223-003 | | RES, 5, 1/4W, 22K OHM | 2.00 | EA | P4 | R1201 R1203 |

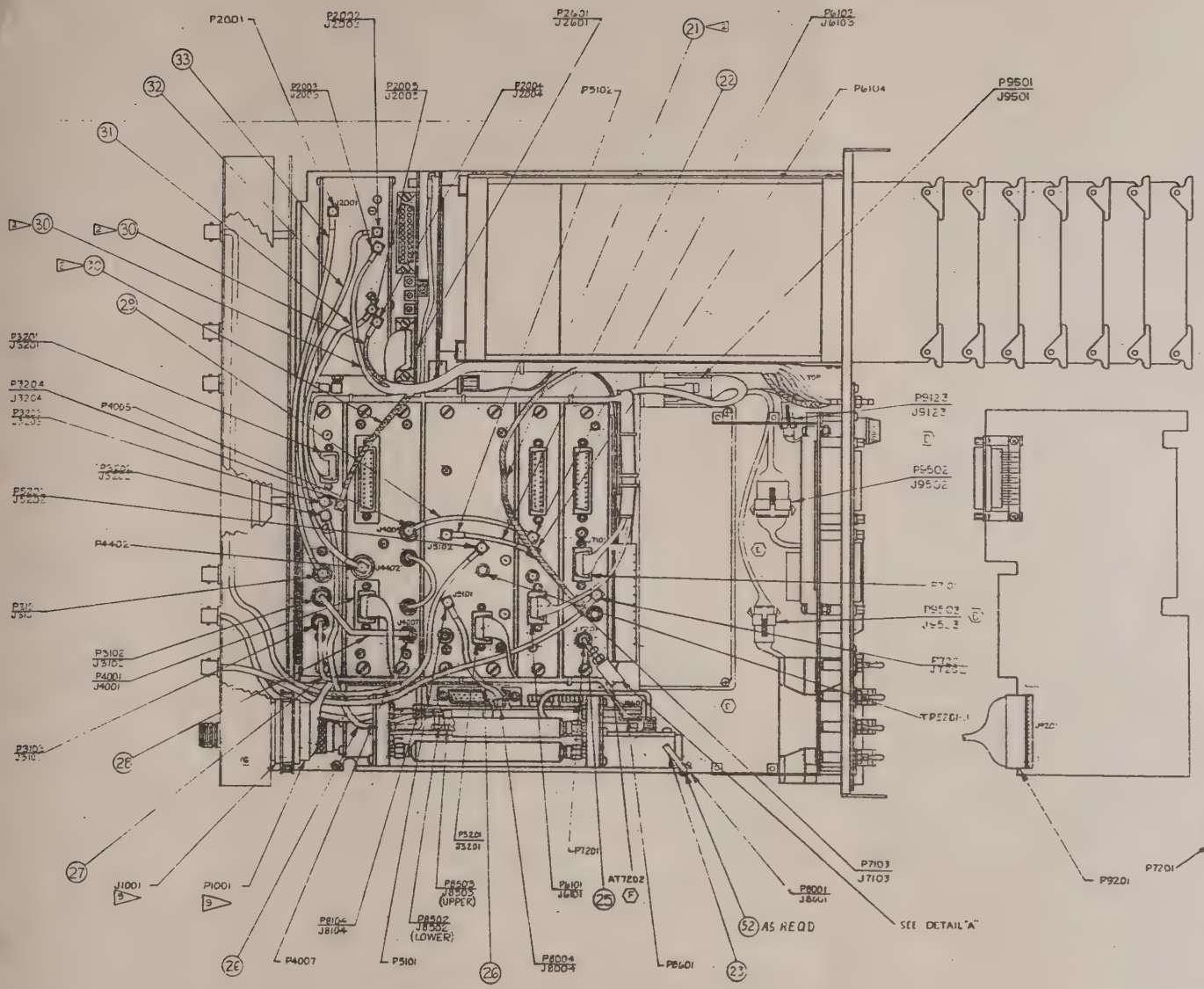
PRINT DATE 87/06/20 BILL OF MATERIAL IN PART NUMBER SEQUENCE PAGE 2

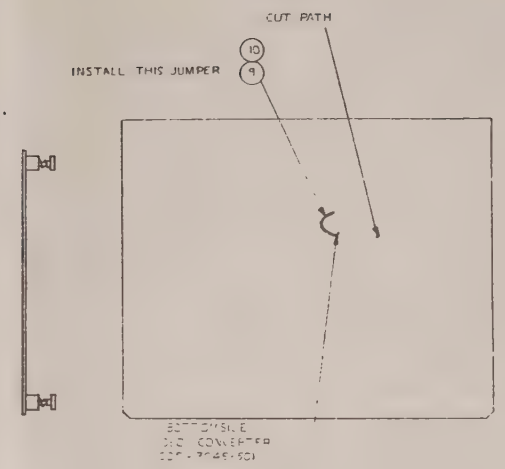
| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC |
|---|---|---|---|---|
| 7010-3036-800 | A2 | PCB ASSY,DISPLAY DIMMER | 9787 | 04/30/87 |

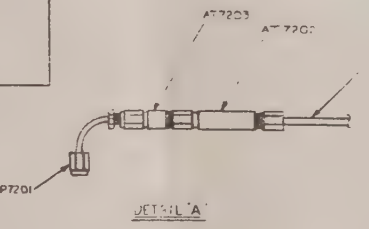
| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 4702-0472-003 | | RES, 5, 1/4W, 4.7K OHM | 1.00 | EA | P4 | R1205 |
| 4752-0204-002 | | POT,200K OHM, 62-1-1-204 | 1.00 | EA | P4 | R1202 |
| 4801-0000-001 | -- | TRANS, 2N2222 .NPN HS SW | 1.00 | EA | P2 | Q1202 |
| 4805-0000-001 | | TRANS,2N2907A,PNP HS SW (3251) | 1.00 | EA | P2 | Q1201 |
| 4810-0000-001 | | DIODE,5082-2303,S BAR, 70VBR | 4.00 | EA | P2 | CR1201 CR1205 CR1203 CR1204 |
| 4835-0000-102 | | INSUL,MICA,TO-220 TRANS,DF103F | 1.00 | EA | P2 | #05 |
| 5050-2452-100 | | TRANS,IRF-521,520,N-CH MOSFET | 1.00 | EA | P2 | Q1203 |
| 5002-0000-006 | | WIRE,HOOK,TFE,22GA, TS,GREEN | 1.00 | FT | FS | |
| 5002-0000-007 | | WIRE,HOOK,TFE,22GA, TS,BLUE | 1.00 | FT | FS | |
| 6004-6005-550 | | TY-RAP,5.5 LG | 3.00 | EA | F4 | #08 |
| DWG-9000-3017-800 | A1 | SCHEM,DISPLAY DIMMER, 1400A | .00 | EA | X | |

JUN 18 1987

| DATE | REV | CHANGE | APPD |
|---|---|---|---|
| 6-18-87 | A | DESIGN REFASE | |




JUN 18 1987

SEE SEPARATE BILL OF MATERIALS

| | | | |
|---|---|---|---|
| TOLERANCES | DRAWN | - WR ENG - WICHITA, KANSAS | |
| | VWAW 6-17-87 | OPTION INSTALLATION | |
| | CHK'D | ATC 1400 A | |
| | ENGR | | |
| | APPD | D 7001-7541-100 | A |
| | | SIZE 3 4 | SHEET OF 1 |

PRINT DATE 87/06/30 BILL OF MATERIAL LISTED BY REF. DESIG PAGE 1 STAT ==: ACT = ACTIVE VALUE

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE INC | ==) PND = PENDING VALUE ==, OBS = OBSOLETE LISTING |
|---|---|---|---|---|---|
| 7001-7541-100 | A | OPT BOM,ATC-1400A,OPT.01,4KW | | 10/30/86 | |

| STAT | REF DES. | QTY | COMP PART NO | DESCRIPTION | EFFECTIVE | OBSOLETE |
|---|---|---|---|---|---|---|
| ACT | | 00 | 5400-7550-200 | LABEL,4KW OPT 01 ATC-1400A | 00/00/00 | 99/99/99 |
| ACT | *09 | 00 | 1050-0000-075 | WIRE,BUS,TINNED COPPER,26GA | 00/00/00 | 99/99/99 |
| ACT | *10 | 00 | 6011-6010-001 | TUBING,TF,26 AWG,NATURAL,TU | 00/00/00 | 99/99/99 |
| ACT | AT7203 | 00 | 2901-0110-013 | ATTEN, 30D, 2W,SMA, @ 9GHZ | 00/00/00 | 99/99/99 |

*** QTY OF REF. DESIG. EXCEEDS QTY PER ASSY ***

JUN 18 1987

PRINT DATE 87/06/05 BILL OF MATERIAL (A PART NUMBER SEQUENCE) LEVEL

| ASSY NO | REVISION | DESCRIPTION | LAST ECN | DATE ENG |
|---|---|---|---|---|
| 7001-7541-100 | A | OPT BOM,ATC-1400A,OPT.01 4KW | | 10/30/86 |

| PART NUMBER | REV | DESCRIPTION | QTY PER | U/M | S/C | REF DESIG |
|---|---|---|---|---|---|---|
| 1050-0000-075 | | WIRE,BUS TINNED COPPER 26GA | .10 | IN | FE | /\/\/\/\/\ |
| 2400-7550-200 | A | LABEL,4KW OPT 01 ATC-1400A | 1.00 | EA | F3 | #09 /\/\/\/\/\ |
| 2901-0110-013 | A | ATTEN. 3DB 2W,SMA, 0 0GHZ | 1.00 | EA | F3 | /\/\/\/\/\ AT7203 |
| 6011-0018-001 | | TUBING,TF 30 AWG,NATURAL,TW | .50 | FT | FE | /\/\/\/\/\ |

JUN 18 1987

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